

Agricultural Economics Department
College of Agriculture
University of Hawaii
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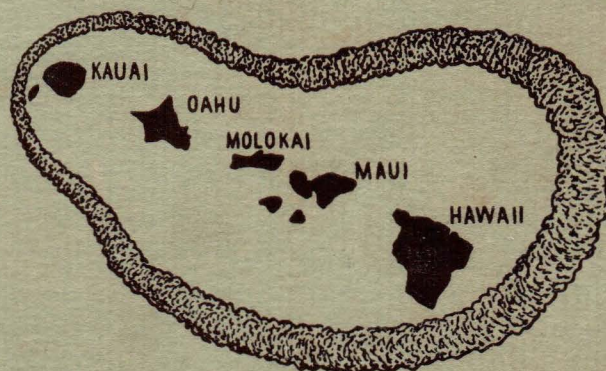
AGRICULTURAL ECONOMICS DEPARTMENT

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First Floral Clinic

PROCEEDINGS

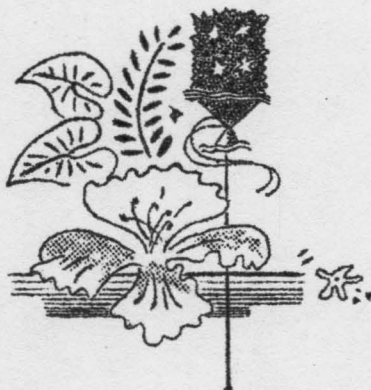
August 9-10, 1954



AGRICULTURAL ECONOMICS REPORT NO. 8
UNIVERSITY OF HAWAII COLLEGE OF AGRICULTURE
CO-SPONSOR: FLORAL ASSOCIATIONS OF HAWAII

F I R S T
F L O R A L C L I N I C P R O C E E D I N G S

August 9-10, 1951



Edited by
Edward L. Rada, Market Economist
Mary Lou Rothwell, Extension Editor
University of Hawaii

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University of Hawaii, College of Agriculture

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Luau: Charles Hapai, *chairman*.

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Floral Association of Maui	Hilo Florists and Shippers Association
Florists and Flower Growers Association of Hawaii	Kauai Flower Growers Association
	Lei Flower Growers Cooperative
Hawaii Flowers & Foliage Association	Lei Sellers Association

ACKNOWLEDGEMENTS

The Floral Clinic, by all measures of public opinion, was a success. The size and enthusiasm of the audience increased as the sessions progressed--unmistakable signs of approval. Everyone attending departed richer in his knowledge and understanding of the problems of the floral industry.

The five mainland speakers--three from the floral industry and two from aviation--made invaluable contributions to our industry. Our deepest gratitude is extended to these men for laying aside their own problems to help us.

The clinic idea, under the guidance of Edward L. Rada, Market Economist, University of Hawaii, stemmed from a project initiated and financed by the Industrial Research Advisory Council, an agency of the Territorial government, recently established to aid the economy of Hawaii through research. Many thanks to the Council for its interest in helping the floral industry to grow and develop:

Many thanks also to the University of Hawaii for co-sponsoring the Clinic with the floral industry. The cooperation between the two groups was excellent and perhaps unprecedented in Hawaii's history. The University provided its facilities and many man-hours of professional assistance as its share in the undertaking while Floral Associations of Hawaii gave a helping hand and met the cash costs of the Clinic.

Approximately 1,000 florists, mostly flower growers, made a financial donation toward the Clinic expenses. Their number does not permit individual recognition, but each can be justly proud of his contribution. The industry response in support of the Clinic was beyond expectations and is even more remarkable when one appreciates the vast number of small flower growers and their dispersal throughout the Territory.

Even with this strong industry support, the Floral Clinic could not have been staged as it was without the financial benevolence of some 25 non-floral firms in the Territory and on the Mainland. These patrons, listed below, deserve special mention (unless otherwise indicated, their main offices are in Honolulu):

American Factors, Ltd.; Bank of Hawaii; Bishop National Bank; California Spray-Chemical Corporation, Richmond, California; Castle & Cooke, Ltd.; Hawaiian Airlines, Ltd.; Hawaiian Electric Company, Ltd.; Hawaiian Freight Forwarders, Ltd.; Hawaiian Gas Products, Ltd.; Hawaiian Hotels Division, Matson Navigation Company; Hilo Meat Cooperative, Ltd., Hilo, Hawaii; Honolulu Advertiser; Honolulu Construction and Draying Company; Honolulu Paper Company, Ltd.; Honolulu Trust Company, Ltd.; Matson Navigation Company; The Moses Company, Ltd., Hilo, Hawaii; National Potteries, Cleveland, Ohio; Northwest Airlines, Inc.; Pacific Chemical & Fertilizer Company; Pan American World Airways; Trans-Pacific Airlines, Ltd.; United Airlines; Universal Motor Company, Ltd.; and The Von Hamm-Young Company, Ltd.

Floral industry members classified as patrons of the Floral Clinic by virtue of the size of their financial contribution, are:

S. Aketa, Hilo; Crossley Associates; Ebesu Flower Shop, Hilo; Florists & Flower Growers Association of Hawaii; Flowers of Hawaii, Ltd., Hilo; Fujikami Florist; Hawaii Flowers and Foliage Association, Hilo; Hilo Florists and Shippers Association, Hilo; Hirose Nurseries, Hilo; Honolulu Orchid Company; Oscar M. Kirsch; Nuuanu Orchid Garden; S. K. Oda, Hilo; W. H. Shipman, Ltd., Hilo; J. Milton Warne; and Robert E. Warne.

On behalf of Floral Associations of Hawaii, mahalo nui loa to everyone sharing in this venture.

Samuel G. Wight

Samuel G. Wight, Chairman
Executive Committee
Floral Associations of Hawaii

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THE PREFACE

The first Floral Clinic in Hawaii's history is a heartening example of cooperation.

The University of Hawaii, the Industrial Research Advisory Council, Floral Associations of Hawaii, as well as individuals and firms throughout the Territory presented a brilliant picture of community investment in the future of the Island floral industry. There had long been a need for such a clinic. There was need for joint, unselfish planning to develop ways of sales expansion, to show present and future commercial flower growers that their problems are mutual and related, and to focus the interest of the community upon the new industry.

There was also the need for cementing our contacts with flower dealers in the continental United States. Those who attended from the Mainland came to realize the seriousness of our problems and to develop patience with our mistakes, for the development of our industry closely parallels that of similar enterprises elsewhere.

As a result of the far-sighted planning for the Clinic, speakers who have witnessed and influenced the vast growth of the mainland floral industry were brought here to trade the benefit of their experience for the local knowledge we have to offer. Because of Hawaii's geographical isolation, our growers, retailers, and shippers, in most cases, would have found it impossible to meet and to hear such authorities. Three of the foremost figures in the floral industry, as well as representatives of the transportation agencies, were brought together in one auditorium for a study of common problems. Through the *Proceedings*, the ideas developed during the Clinic are being spread to others unable to be present.

It is imperative that our industry realize its position in the mainland market, improve its products and its practices, and work cooperatively to keep, not merely abreast, but ahead of its nation-wide competition. With this objective in mind, I congratulate the many far-seeing persons who worked to make the Clinic an actuality.

H. A. Wadsworth

H. A. Wadsworth, Dean
College of Agriculture
University of Hawaii

HIGHLIGHTS OF THE CLINIC

Key statements taken from the talks given at the Floral Clinic are reproduced here as a summary of the Clinic. The statements are interwoven to present the problems of Hawaii's floral industry (many are the same as on the Mainland) as well as suggested solutions of the problems.

BACKGROUND Hawaii needs more and better ways of making a living. The Floral Clinic is an example of how Hawaii is helping itself to achieve a more balanced economy (*Governor Long, p. 2*). Honolulu and other parts were barren and dreary in the extreme prior to 1798 compared with the cool and beautiful groves of the present. The climate and customs make it so natural to grow and use flowers (*Beaumont, p. 5*). Floral products are our latest and perhaps the most rapidly growing of our diversified crops (*Henke, p. 3*).

You have tried to do in 5 years what we on the Mainland have accomplished in 50. You are still in swaddling clothes--learn from our mistakes; take up our good habits and not our bad ones (*Sykora, pp. 37 and 40*). You already have a clinic and are way ahead of many floral groups in the United States (*Goeppner, p. 78*).

PRODUCTION You have a problem in controlling production--your output can be multiplied very rapidly (*Haley, p. 20*). Our growers are small compared with the size of mainland production units. Competition is thought of in terms of price. Consequently, prices are unstable. It is difficult to assemble enough of one product of a given grade to fill a large order (*Rada, p. 59*). Breeders are throwing away valuable breeding material in their first generation hybrids. They should make crosses that will produce many flowers demanded by consumers (*Kamemoto, p. 12*). It's time we discarded our poor stock and started concentrating on good quality products (*Pratt, p. 19*). Elimination of poor quality is your first saving (*Sykora, p. 71*).

Disease and virus problems are continually under observation at the University. We attempt to develop treatments quickly, but results can only be achieved with painstaking research. Nothing eliminates a market quicker than a plant quarantine restriction (*Hendrix, p. 23*). While the University is studying the problem, practice utmost sanitation, and isolation if necessary, to limit the spread of the disease (*Haley, p. 15; Sykora, p. 40*).

TRANSPORTATION World War II developments in air transportation have brought the mainland market within reach of Hawaii's floral industry. Newer, faster planes, more frequent schedules and lower rates are aviation's contributions to this industry (*Young, p. 28*). Transportation is a vital link in the whole marketing chain. Your products have little value until you get them to the consumer (*Dare, p. 45*).

All packages should be mailed early, especially prior to holidays. Don't gamble with airplane schedules. The recipient will be much happier to receive the flowers a day ahead than a day after the event (*Damron, p. 42*). We have peaks in air freight too--everyone ships more during the holidays. Don't expect air freight rates to be the solution to your marketing problems. By compromise the airlines and the floral industry can reach a level where we will both be better off than if we didn't get together (*Dare, pp. 46 and 55*).

MARKETING You could handle your flowers much better; you are too rough with them. I suffer **PRACTICES** when I see flowers mistreated. Your mistreatment doesn't show up until we get them (*Goeppner, p. 33*). Growers and shippers tend to relax their quality standards when they have built up a market. Then they have to come back with better products than before to regain the market. Just because you receive no complaints from the consignee, don't assume your product is perfect. Actually, you must improve quality as you go along in order to meet competition (*Sykora, pp. 37 and 70*). Our carnation grades are getting stricter every year (*Haley, p. 23*).

The peak of the mainland market occurs in the winter and spring months. In the summer months the florists' business is poor and is reflected in the slow sales and low prices in Hawaii (*Rada, p. 65*). Don't hold back your flowers for a bonanza price at holidays; by the time you reach the market with overmature flowers your losses will offset your gains. The

discontentment with the present low prices for vandas is an indication that the growers do not understand the marketing process (*Sykora, pp. 40 and 71*).

Packaging is one of your more critical problems. Strength in a box is essential but you must also consider economy in transportation costs. Boxes should be waterproofed inside to prevent absorption of moisture from the flowers. Nothing disintegrates as rapidly as a wet cardboard box. Staple your flowers into the box solidly and don't let anything touch them. Place the heavy products in the bottom of a box. Package for the extremes in weather--don't bank on the transportation companies to protect your flowers (*Sykora, pp. 36 and 54*).

Preservation is of utmost importance to you. Experiment with precooling of your products; perhaps the use of CO₂ may preserve your flowers longer. Remove the mildew and other blemishes from flowers. They are expensive, so improve their keeping quality and make them presentable (*Sykora, pp. 38 and 74*).

Presentation is becoming more important. A retail florist must evaluate his package in terms of what it is worth to the customer and not what it is worth when it leaves his shop. Even retail florists and wholesalers prefer to buy something presented in good taste (*Goeppner, pp. 31 and 91*).

PROMOTION AND SALES To regain the florists' market with vandas you will have to grow them better, improve their color, size, and keeping quality (*Sykora, p. 71*). Sell them as a spray to retail florists; a spray won't be in competition with your vanda promotion business (*Goeppner, pp. 78 and 85*). Use more of the retail florists in handling promotions for you (*Sykora, p. 72*). Keep as many of your products as you can for the retail florists; they do 60 percent of the retail floral business (*Haley, p. 17; Sykora, pp. 34 and 73; Goeppner, p. 78*). Style filters downward; it never goes up from a dime store to an exclusive shop. You are selling style merchandise (*Haley, p. 106*).

Promote your products--create ideas. If you create ideas, you create sales. Don't expect the wholesaler or retailer to do all of the selling for you (*Goeppner, pp. 81 and 93; Sykora, p. 112*). Tell us about your products, when and in what colors, sizes and prices they are available (*Haley, p. 18*).

There is a definite place for more of your merchandise in the mainland markets (*Haley, p. 17; Sykora, p. 73; Goeppner, pp. 34 and 79*). Hawaii has an advantage over competitors with many of its products in most markets (*Rada, p. 69*). Find your advantages and exploit them. You need just a small advantage over your competitor to triumph (*Haley, p. 21*).

COOPERATION Hawaii's producers are competing against each other, rather than against other areas and products. An organization is needed on a territory-wide, industry-wide level to guide the development of the industry (*Rust, p. 99*). Work out a plan so that you don't kill your own market. You will eliminate yourselves very fast if you don't stabilize your prices and grades (*Goeppner, p. 81*). Collectively you can do many things; alone, you are going to be small-time operators. Lay out plans for one year; they might take you five, but you might achieve your goals in three (*Haley, pp. 16 and 111; Sykora, pp. 35 and 86*).

This Clinic is a prime example of government and private enterprise cooperation (*Craig, p. 108*). If you will cooperate, and if you are helped by even one idea, regardless of what it is, it's been worth your two days here at the Clinic (*Goeppner, p. 78*).

CLOSING SESSION

PLANS FOR THE COMING YEAR

Samuel G. Wight

We have from now (4:30 p.m.) to 7 p.m. to discuss the plans for the coming year, but it won't take me that long to close the meeting. (Laughter.) You are here today from all segments of the industry, from all sections of the Territory, and you speak for the industry. Is there a desire on your part to make Floral Associations of Hawaii a permanent thing? May we have a show of hands on that question? (Show of hands.) Are there any negative votes? (None.) Your vote is unanimous.

PLANS FOR THE COMING YEAR Plans for the coming year certainly will be based upon the great contribution that has been made by our mainland guests. I want at this time, on behalf of all of the committee members and on behalf of all of those who have contributed toward making the Clinic possible, to say, thank you and aloha. On behalf of the committees and everyone who has worked for the Clinic, to each and every individual, to every organization, to every company that has contributed, thank you, mahalo nui loa, and aloha. (Applause.)

BIOGRAPHIES OF MAINLAND SPEAKERS

E. L. (Dick) DARE, manager of air cargo sales for United Air Lines, recently completed his twentieth year with the company. He received a bachelor of science degree in business administration from Knox College, Galesburg, Illinois, in 1927, and joined United Air Lines in 1931. He held subsequent posts in several large cities and was one of four specialists assigned to organize the air cargo department of the company in 1940. Promotion to his present post came in March, 1950. His headquarters are at the United executive offices in Chicago.

EDWARD GOEPFNER is managing partner of the outstanding San Francisco retail florists' firm, Podesta Baldocchi, and is considered one of the foremost florists in the country. He began as an errand boy with the firm many years ago, held a number of different positions, and became a junior partner in 1927. In 1945 he was named managing partner. Since assuming management, he has seen Podesta Baldocchi's business doubled.

O. BEN HALEY, JR., is secretary-treasurer and general manager of the Denver Wholesale Florists Company, a grower-owned corporation. He is also one of the Denver growers who pioneered the Colorado Flower Growers' Association, which has a membership of over 90 percent of those growing and selling Colorado carnations. This association has "lifted the carnation from a funeral flower to its present enviable position..."

JAMES SYKORA is general manager and secretary of Amling Company, Chicago wholesale florists. He received his bachelor's and master's degrees from the University of Wisconsin and has long been active in the national floral industry, holding executive position in many floral associations.

COLONEL CLARENCE M. YOUNG, who has almost 25 years' experience in aviation, is vice-president of Pan American World Airways, assigned to the Pacific-Alaska division. He was director of aeronautics for the U. S. Department of Commerce from 1926 to 1929 and assistant secretary of commerce for aeronautics from 1929 to 1933. He became manager of Pan American's Pacific division in 1935, and served as a member of the Civil Aeronautics Board in 1945. In 1947 he became general manager of the Los Angeles airport, and early in 1950 he was elected a Pan American vice-president.

WELCOME ON BEHALF OF THE TERRITORY

Governor Oren E. Long

ALOHA Mr. Chairman, distinguished visitors, guests, ladies, and gentlemen. You know, this custom we have here of presenting leis--and I confess that it is a custom that I heartily approve of and greatly enjoy--seems particularly appropriate on an occasion like this, doesn't it? I think this is one of the really significant developments here in Hawaii, and I congratulate those who dreamed the dream and then had the courage and the ingenuity to turn it into a reality. And particularly at this time I wish to express the appreciation of the members of this Association, and I think just about everyone in Hawaii, for the courtesy shown to us by experts in this field from the Mainland. We extend our greetings and Aloha. We're delighted that you're here.

PLANNING AHEAD One of the qualities that determines the progressiveness of any community is the ability of its people to work together in planning ahead. Whatever our achievements of the past, our day to day life must essentially be preoccupied with the future, if we are to meet the changing and developing requirements of our people in this changing world. Hawaii's history for over a century is an inspiring record of planning ahead. A record of vision and pioneering. It is because we have such a history that Hawaii today, in terms of living standards, culture, health, education, and human welfare is the envy of the Pacific world. But the future is ever before us. We do live in a changing world. Where we will be five years from today or ten years from today depends almost entirely upon the vision and pioneering spirit that we show at this time.

HAWAII'S MAJOR PROJECTS I think we will all agree that Hawaii is working toward two major projects. Each of them is a great challenge. First is statehood. We want and we confidently expect to take our place in full partnership with the rest of the United States. We expect to exercise our best abilities in contributing to the making of national policy through our elected representatives to the Congress and through aiding in the selection of national administrations. We want to participate. But the decision for statehood rests with persons outside of Hawaii. While we are doing our best to make our desires and qualifications for statehood known to them, we have another great goal--one that's eminent. That goal is to continue to develop Hawaii. To develop it in terms of creating opportunities for a better life for all who live here. This goal should and must receive our best efforts, thought, and realistic vision. Hawaii needs more and better ways of making a living.

OPPORTUNITIES Our population has declined somewhat from the peak levels reached in the immediate postwar years. This has been caused by out-migration as our community has adjusted itself to postwar conditions. But the fact is that our population through excessive births over deaths is increasing in the neighborhood of ten thousand a year. In terms of California, a very small increase, isn't it? But in a limited locality with a limited economy it adds to the challenge that is before us. Our high schools and colleges are turning out more than five thousand splendid young men and women each year. And they're looking for opportunities right here. In addition Hawaii has one of the finest climates for living in the entire world. No apologies, even to Californians. And with continued improvement in transportation more people will want to come to Hawaii to live. That is, if we can find something for them to do. That's our challenge. We need, then, more business in Hawaii to provide new and better ways

of making a living. We need to produce more in Hawaii, both for local consumption and to sell in world markets to give us more income to purchase the things that we cannot produce here.

In the recent abnormal post-war years, we've been buying more than we've been able to produce. Hawaii has been spending its savings. Such a situation for a short period is not alarming. In the immediate post-war years there was an accumulation of needs that could not be filled during the war years. But if we continue to spend more than we sell, we will fritter away our capital savings which we need to build Hawaii in the years ahead. Our natural resources are limited. We do not have materials and several other things required in the way of raw materials in most of today's manufacturers.

But we do have certain great assets. We have one of the finest combinations of rainfall, sunshine, and even temperature that can be found anywhere in the world. This has been found admirably suited for certain specialized sub-tropical products. Certainly few persons of vision believe that the pineapple was the last major product that can be developed successfully here in this community. In the quest of new products, the development of our commercial flower business in recent years has really been an inspiration. Hawaii's floral industry is not new and yet the efforts to build a market for these exceptional Hawaiian products in continental United States are comparatively recent. With the advent of large-scale transportation between the Islands and the Mainland, our floral industry has achieved steady growth. But those in the industry, the growers, the shippers, the wholesalers, and the retailers are far-sighted and are looking to greater and more rapid expansion through cooperative efforts. This is a sort of voluntary working together for a better future. That is the hall mark of a progressive community.

GOVERNMENT These efforts on the part of private enterprise have not gone
HELP unassisted by the government. In our American private enterprise system, the basic function of government is to aid in creating conditions conducive to growth and in achieving situations which enlarge the scope of opportunity. A part of this function is to aid in the collection of information concerning production and markets for those products. New businesses, at least in the early phases, often find themselves unable to reach out far enough and fast enough to get past essential exploratory phases. Indeed the Floral Clinic was conceived by an employee of the Government while conducting a study of mainland markets for Hawaiian products supported by the University of Hawaii under a grant from the Industrial Research Advisory Council, which incidentally is another governmental agency. The government does play a part.

FLORAL This Floral Clinic, the first of which I hope will become a great annual
CLINIC event, is a prime example of how Hawaii is helping itself to achieve a more balanced economy. Eight associations representing growers, retailers and shippers of Hawaiian flowers and foliage have joined together to form the Association. This Clinic is the first undertaking of this new organization. It is this kind of cooperation, this pulling together for mutual benefit that is helping Hawaii to grow and to prosper. Exploratory efforts aided by government can succeed, but they can succeed only when aggressively followed up by private enterprise, just as you are following it up here.

FLORAL The mainland floral experts who are guests of the Clinic will have a
INDUSTRY great deal of sound advice to offer. Assistance of this nature is
COOPERATION difficult and I feel certain that Hawaii's floral industry will long be indebted to you Ladies and Gentlemen. Again I repeat that we're

delighted that you are here. We need you. I've been told that Hawaii's floral industry, now selling a little over two million dollars annually, could double this value in a relatively short period of time, if proper steps are taken to implement such expansion. Knowing how well the industry worked together to inaugurate this Clinic, it seems more than reasonable that continued effort will result in a prosperous flower and foliage industry for Hawaii. In every way I wish you success. Unlimited success. And again I commend you for your vision, your enthusiasm and your capacity to plan for the future. Thank you.

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WELCOME ON BEHALF OF THE COLLEGE
OF AGRICULTURE

Louis A. Henke

WELCOME Mr. Warne, distinguished visitors from the Mainland, members of the Floral Clinic, and friends. On behalf of the College of Agriculture of the University of Hawaii I am very pleased to welcome you to this campus. We like to have visitors in the Territory. In fact, we have the Hawaii Visitors Bureau, which aggressively promotes what they call our third industry.

DIVERSIFIED I'd like to speak a bit this morning about what I will call our
AGRICULTURE fourth industry, namely, diversified agriculture, and that includes flowers. Let us look at the picture a bit and see what our background is, what we now have, and what we may have here sometime in the future. You are familiar with our sugar and pineapples. The sugar crop of this Territory was worth \$124,000,000 in 1950. The pineapple pack was worth about \$88,000,000. Diversified agriculture which I call our fourth industry was worth about \$31,000,000. That is a total of about \$240,000,000 of agricultural produce grown on roughly 300,000 acres of land, or a return of something like \$775 per acre of cultivated land. Now to get back to the third industry, how does that compare? I am told that last year we had in this Territory about 57,000 visitors spending an average of about \$600 apiece. I am told that they spent \$35,000,000, slightly in excess of the earnings from diversified agriculture. I neither know how these figures were determined nor is that a concern of us who are working in the College of Agriculture.

We have about 4 million acres of land in the Territory. About one-fourth of the total area is given over to forest reserves which are very vital to us because of the water supply they insure, and we have about 1½ million acres devoted to our ranch industry. Our chief concern is to develop, promote, and expand in every way possible diversified agriculture--not because we are disinterested in sugar and pineapple, because we are, but those two industries are adequately serviced by their very excellent private experiment stations.

VALUE OF Let us look a bit more at what we call diversified agriculture. Of
DIVERSIFIED the some 30 million dollars derived from it last year, about 20 mil-
AGRICULTURE lion dollars came from livestock, beef cattle, milk, swine, poultry, and about 6 million came from what I call horticultural things, such as, vegetables, fruits and taro. We received about 2 million dollars last year from our coffee crop, and as Governor Long indicated, our floral industry also was estimated to be worth about 2 million dollars. Floral products are our latest and

perhaps the most rapidly growing of our diversified crops. For this reason we are most happy to welcome you to the College of Agriculture to share our knowledge with you and to have you give us the benefit of your broad experience in the fields of growing, transporting, and marketing flowers.

The University of Hawaii was started in 1907 as the College of Hawaii. For a time in the early years, the faculty outnumbered the students, but those trying early years are past. Enrollment is now around the 5,000 figure. Some 700 degrees were granted last June. Compared to the University of California, we are still a small institution, but we occupy a strategic place between the Occident and the Orient and we believe this institution is already playing an important role as a meeting place of these great cultures. In agriculture our emphasis is on tropical agriculture, and we are ambitious to make this one of the leading tropical agricultural colleges in the world.

VALUE OF RESEARCH We do not believe that research alone, which is the business of the College of Agriculture or at least the Experiment Station, can solve all of Hawaii's problems. But we believe it can help a good deal. Recently, the Dupont Corporation erected a new 30 million dollar research institution at Wilmington, Delaware. At this dedication ceremony Mr. Greenwall, the president of the Company, said, "It is essential to recognize that the vast social and material gains that America has made in the past five decades have not been accomplished by legislation, by deals old, new, or fair, but simply through the application and encouragement of invention and development." Speaking at the same ceremony President James B. Conant of Harvard University said that the progress of Soviet technology will almost stop once the past accumulated knowledge gained from the free world has been exhausted. "Soviet science cannot succeed in the long run," he said, "because the system denies the scientist freedom of inquiry, but," he warned, "we must not underestimate the immediate power of Russia." Continuing, Dr. Conant said, "Behind the Iron Curtain the independent inventor, the amateur scientist, has not only disappeared but he has left no recognizable descendants." So we are continuing here at the College of Agriculture, in our limited way, to search for new facts which we think will be of benefit to diversified agriculture.

FUTURE MEETINGS We welcome you to the College of Agriculture of the University of Hawaii and thank you for coming. We trust these meetings will be of great value to you visitors and to ourselves, and may I express the hope that this meeting is merely the forerunner of others along this and similar lines.

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G R O W I N G S E S S I O N
D E V E L O P M E N T O F F L O R I C U L T U R E I N H A W A I I

J. H. Beaumont

MILESTONE It is a pleasure to appear before this, the first Floral Clinic to be conducted in the Territory. This clinic represents a very definite milestone in the evolutionary changes that are occurring in the development of floriculture and ornamental horticulture in these islands. It is comparable to the graduation or commencement day at the university when the young man or woman, having received certain basic trainings and disciplines, steps out into the world to make his own way in the highly competitive business of making a living.

PRECEDENT It falls into a similar pattern to that demonstrated by the Experiment Station of the HSPA and by the PRI. In both instances the members of new and growing industries in the Territory felt the need of the research and support that could be gained by pooling their resources and working to the mutual benefit of all. That the principles upon which these institutions are founded have demonstrated their value is unquestioned. That the mutual effort of the growers, wholesalers, and retailers of floricultural products and of the University and IRAC in putting on this clinic will be of such great value as to fully justify future clinics and the development of a closer intergradation of growing and marketing of floral products is not to be doubted.

MY TASK I have been assigned the pleasant task of tracing briefly the development of this important new industry. Actually the task should have been assigned to one of many others much more competent because of their longer and more direct association with floriculture and their own personal contributions to this industry.

FLOWERS IN HAWAII'S CULTURE There is no place in the world where the growing and use of flowers enters so intimately into the life of the people or where the climate and customs make it so natural to grow and use them. Armitage^{1/} states that "In old Hawaii, much as in the Hawaii of today, leis were used on such gala occasions as birthdays, marriages, welcomes, feasts and hula graduations. Sometimes they were worn continuously. Always there is the thought of love or affection, and best wishes accompanying the gift of the lei."

Brown^{2/} states "It has been well established in tradition and literature, sculpture and art that numerous and various types of leis and wreaths had been evolved on the continent from which the Polynesians came. It is quite expectable that they would have brought with them the cherished memory of these different kinds of leis ... The maile may be considered one of the oldest of all leis ... Another ancient Polynesian lei is the ginger lei made of the creamy-yellow spicy flowers of Hedychium flavum. Its great age is indicated by its occurrence throughout Polynesia wherever the plant will grow. The fondness of the Polynesians for this type is clearly indicated by its being the only plant which they carried with them to every part of Polynesia for the making of leis."

^{1/} Armitage, George. The Hawaiian Lei. Hawaiian Tourifax Annual. Hawaiian Tourist Bureau, pp. 64. 1937.

^{2/} Brown, E. D. W. Polynesian Leis. American Anthropologist 33: 615-619. 1931.

While by no means all leis were flower leis, it is apparent from the above references that flowers played an important role in the life of the Polynesians. It is small wonder, then, that the culture of flowers would be destined to play a much greater part in the life of the people of Hawaii.

INTRODUCTION OF PLANTS However, not to give the erroneous impression that in old Hawaii, the people, bedecked with leis, danced and sang all day, we must realize that the business of living was a matter of very serious concern. Food was limited in variety and quantity. According to early accounts Honolulu and other parts were barren and dreary in the extreme. It is understandable that beginning with Capt. Cook himself in 1798, followed closely by Capt. Calumet, Capt. Vancouver, Don Francisco Marin, and many others, the earlier introductions of plants and animals were mostly of a utilitarian nature. In 1813 the Marin records in his journal the planting of pineapple, orange trees, peaches, figs, lemons, beans and cabbages, as well as other plants new to the Territory. With the arrival of the missionaries and their wives and families in 1820 greater emphasis was undoubtedly placed upon ornamental plants and flowers.

Rock^{3/}, in the introduction to his book, remarks as follows: "Numerous must have been the introductions of both ornamental and useful plants as early even as 1840, for W. L. Lee, president of the Royal Hawaiian Agricultural Society, writes on June 7, 1853: 'Let those who wish to be convinced of the value of trees look back a few years upon the burned and barren yards of Honolulu and compare them with the cool and beautiful groves of our (present) forest city.'" And in 1917 Rock states: "That it is really astonishing how many species of plants ... adorn this beautiful city; indeed an arboretum in itself."

He gives great credit to Dr. Wm. Hillebrand, and remarks that "Honolulu owes him the profoundest gratitude."

DR. HILLEBRAND'S CONTRIBUTIONS Living proof of the contributions of Dr. Hillebrand to the beauty and culture of the Territory is to be found at the Foster Garden which formerly was his home and where he planted most of the plants he introduced during his extensive travels through the orient while making his home in Honolulu from 1865 until his return to Germany. The home and garden were acquired in 1880 by Capt. and Mary Foster and in 1930 Mrs. Foster willed the garden to the City and County of Honolulu as a botanical garden and public park. Dr. H. L. Lyon was named director and it is to him that the people owe the development of the garden since 1930 and its magnificence today.

In this connection it is interesting to note that in the Honolulu Advertiser for December 15, 1938, under the heading 70 years ago today, or December 15, 1868, the following is quoted: "During a stroll through the grounds of Dr. Hillebrand we were shown an orchid in bloom. The flower is extremely delicate in color and perfume. It is probably the first one that has bloomed in these islands."

This is the first reference to the orchid in Honolulu that has come to my attention. Perhaps we should give Dr. Hillebrand credit for this introduction.

^{3/} Rock, Joseph F. The Ornamental Trees of Hawaii. 1917.

ORCHID CULTURE Looking further into the first origins of the floral industry or more particularly orchids we find that Ellen Williams in an article in Paradise of the Pacific, December 1934, states that orchid growing in Hawaii started about 1896 when a shipment of phalaenopsis, and Dendrobium superbum was brought here from the Philippines.... A couple of years later Mr. Samuel M. Damon started to import species of cattleya in quantity. A few years later we hear that Mr. E. D. Tenney became interested and started introducing orchids, also Mr. Atherton.

The Advertiser of November 8, 1949, in its column forty years ago, 1909, states: "Few people know that there are several large and very valuable collections of orchids in Honolulu owned and tended personally by men and women with whom they have become a hobby--for orchids are the queen of all hobbies."

These are the first reports of orchid growing in the Territory that have come to my attention to date. I hope to do more research in this field in the near future and hope that anyone having interesting facts will call them to my attention.

Mr. Damon was responsible also for the importation of many other fine plants to the Territory, among the best known being the Pirie mango and the beautiful anthurium. The latter was imported in 1889 from London and is said to have been A. andraeanum.

Thus, shortly after the turn of the century, the drab dusty Honolulu of early missionary days had metamorphosed into a virtual arboretum. A large number of the flowering trees and shrubs, of ornamentals and garden flowers, had become established. The stage was set for the second phase in the development of the floricultural industry, viz. the rapid expansion of amateur and professional interest in flower production and marketing and the gradual exploration and development of export markets.

EXPANSION OF INTERESTS Development of this second phase was slow at first because of World War I, inadequate transportation, and the many vital economic and political problems facing the new Territory. Orchids and anthuriums were still the rich man's hobby.

However, interest in flowers and floriculture was continually mounting. In 1911 a hibiscus society was formed to stimulate interest in the more desirable varieties and their use in the garden. Wilcox and Holt^{4/} report that the first hybrids were produced by W. M. Gifford in 1902. They give a long list of breeders and importers who had contributed to the development of this beautiful plant. This is mentioned to indicate the early interest in plant improvement by breeding which has since been applied to orchids in the Territory with even more striking results.

Following the early orchid collections built up by Mr. Samuel M. Damon and Mr. E. D. Tenney it is recorded^{5/} that Dr. H. L. Lyon soon after his arrival in the Territory in 1907 continued his earlier interest in orchid culture. As he developed the HSPA forestry nursery near Hillebrand Gardens he included orchids in the cultures. These as well as a large part of his very large and extensive personal collection were transferred in part to the Foster Gardens when it was established in 1931. Others, notably E. D. Tenney and Frank C. Atherton, have contributed to the outstanding Foster Garden collection.

^{4/} Wilcox, E. V. and V. S. Holt. Ornamental Hibiscus in Hawaii. H.A.E.S. Bul. 29. 1913.

^{5/} Martin J. P. The Foster Garden Orchid Collection. Pac. Orch. Soc. 4 Number 2. July, 1945.

Perhaps one of the earliest and largest importers and growers of orchids in the early 1900's was Mr. Harold Jeffs who unfortunately lies quite ill at his home at this time. I am told that he imported dendrobiums from the Philippines and cattleyas from South America and many plants from dealers on the Mainland. He sold plants to other collectors and flowers to local florists. About 1914 Mr. Jeffs sold his collection of more than 1000 plants to Mr. Frank C. Atherton. Unquestionably Mr. Atherton grew orchids before this time, but this acquisition greatly enhanced his collection. After 1930, and with the able assistance of Mr. Oscar Kirsch this collection became one of the outstanding orchid attractions of Honolulu.

From this time on it would be impossible for me to name the collections chronologically or in order of size and variety. As a matter of fact important contributions already may have been omitted. I hope they will be called to my attention.

BOOM Interest in orchid culture mounted steadily until in 1930 it more or less assumed the proportions of a boom. This was the transition period between the time of the few and exclusive collectors to the many smaller but enthusiastic growers and to the beginnings of real commercial development. J. M. Warne in the Honolulu Advertiser of January 26, 1936 writes that "in five years the number of collections has risen from only a few until now there are well over 100 collections worthy of the name."

REGISTRATIONS This intense interest is demonstrated by the registrations of the new orchid hybrids given in Sanders' Complete List of Orchid Hybrids for 1946, assuming that in the earlier days it would require 10 years or more to raise seedlings to flowering. I will list a few of the names in chronological order under some of the larger genera up to the year 1946. Occasional names may have been overlooked inadvertently and if so I must apologize. However, perhaps this partial list is of interest in indicating the large number of growers who undertook orchid breeding almost simultaneously from about 1930 or a few years earlier.

<u>Brassocattleya (Brassavola x Cattleya)</u>		<u>Cattleya</u>	
Hirose	1941, 1944	Atherton	1939, 1942, 1945
T. Kodama	1944 (7), 6/ 1945 (3)	Williams	1939
R. Warne	1945 (2)	Hirose	1941, 1944 (2)
		Kodama	1944 (3)
<u>Brassolaeliocattleya</u>		Robert Warne	1944
		M. Warne	1945
Lyon	1941		
Kodama	1944 (3), 1945 (3)	<u>Dendrobium</u>	
Tanaka	1945	Miss Ellen Williams	1938, 1941 (2), 1943
Warne	1945	Atherton	1940, 1942, 1945
		McCoy	1943 (2)
		Nuuanu	1944
		Goo	1945 (4)
		Hirose	1945
		Kodama	1945

6/ Number in parentheses indicate the number of registrations in the year indicated. The date alone indicates one registration.

Epidendrum

Montague Cooke 1945
Hirose 1945

Laeliocattleya

Williams 1940, 1943
M. Warne 1941, 1943, 1944,
1945
Hirose 1941, 1944 (2)
Atherton 1943
Rolla Thomas 1943
Takumi Kodama 1944 (5), 1945 (9)
Foster Gardens 1945

Oncidium

Atherton 1940 (3), 1942, 1943
1944, 1945
Kihara 1945

Phalaenopsis

Atherton 1938, 1941 (2), 1942
(2), 1943, 1944 (2)
Mrs. Lester McCoy 1943 (2)
Sideris 1943, 1944
Shipman 1944

Renantanda

Atherton 1944, 1945
Carter 1945

Renanthera

R. Warne 1942

Spathoglottis

Atherton 1939, 1943
Nuuanu 1940, 1943
Lyon 1941 (5), 1944 (2)
Carter 1943, 1944

Vanda

Shipman 1940, 1944, 1945 (4)
Gillmar 1943
Lyon 1944
Sumner 1945
Atherton 1945
Cummins 1945
Foster 1945
Tanaka 1945

Vandaenopsis (Ph. Denivei x V. Sanderiana)

Atherton 1939

But this list represents merely the first beginnings of active and constructive hybridization and orchid improvement. It was reported recently by the Registration Committee Chairman of the Pacific Orchid Society that 100 names of new hybrids had been sent to Sanders in 1950 for registration and that already this year, 1951, which is hardly half over, 100 more have already been submitted.

The 1946 list of registrations from which I have quoted does not indicate the number and variety of the collections whose owners did no breeding work. It does not necessarily indicate either that the person listed actually made the cross since flasks of unnamed seedlings were imported from mainland sources. It does not indicate the experimentation, trials and errors, disappointments and failures. More particularly it does not show some of the early successes, many of which were never registered. This is particularly true of some of the early spathoglottis, phalaenopsis and vanda hybrids, some of which had already been named or which were submitted too late to receive priority or perhaps which were never submitted at all.

The list, with the close grouping of dates, does indicate that in the preceding 10 to 15 years or about 1930 to 1935 a large number of people were building large and varied collections and were enthusiastic hybridizers. For example it was in 1928 that Mr. T. Kodama and Dr. Harry Kurisaki laid the first foundations of the Kodama Nurseries which were commercialized in 1935. I am told that the first sowing of orchid seed was on September 27, 1935.

INTEREST IN
HAWAII AND
KAUAI

Interest in culture and hybridizing of orchids was by no means limited to Oahu. Mr. Takumi Kono is quoted as follows from the Hilo Tribune of October 28, 1945: "The history of orchid growing in Hilo goes back

to Herbert Shipman who was Hilo's first orchid grower. His first plant acquired in 1907 was a Phal. Schilleriana which is still among his vast collection of orchids. Next came the late Dr. E. Yoshimura who influenced many people to take up orchid growing. Others who were among the first were: S. Kawasaki, Maj. Lester Brayan, Dr. E. Mitchell, Alex Anderson, Herbert Small and Y. Hirose."

Strangely enough the Garden Island which of late may have lagged somewhat in its orchid interests was at the forefront in the early days (about 1913) due to the active interest and extensive collections of Dr. Kimura of Hanapepe, and Dr. Mukai and Mr. Taketa of Waimanalo. Mr. T. Makashima who gained experience from Dr. Kimura and Dr. Mukai was later gardener for Miss Rose Sylva and has since been regarded as one of the best cattleya growers in Honolulu.

HISTORY OF
VANDA
MISS JOAQUIM

The history of the most important orchid in Hawaii--Vanda Miss Joaquim--does not seem to be too fully recorded. In the Florists Exchange and Horticultural Trade World for August 24, 1935 under an article entitled "Orchids in Hawaii," Dr. H. L. Lyon is quoted as follows: "He identified the species, or rather hybrid, as Vanda Miss Joaquim, the result developed in Singapore, by crossing V. teres and V. Hookeriana... It is easily propagated by cuttings, he asserted, and grows in open gardens in full sunlight... At least it has for him in the 10 years since he brought it to Honolulu from Singapore."

Thus we can assign 1925 as the date of the introduction of Miss Joaquim to the Territory providing of course that the article was printed the same year the interview was given.

The following which also is quoted from the above article seems almost like a prophecy of what has actually developed today. "Orchids to everybody. Orchids growing over the trees in people's front yards, and standing up in the sunlight of their gardens. Orchids as plentiful as poppies in California. Not only that, but orchids cut in Hawaii will stand transportation to any part of the U. S. and arrive in good condition."

Perhaps the first to undertake mass propagation of the Vanda Miss Joaquim were the Warne Brothers of Honolulu. Mr. Milton Warne tells me they received their first cuttings from Mr. Alex Anderson and others from Mr. Herbert Shipman, both of Hilo, as early as 1931. In 1935 they had more than 300 plants and the next year the number had increased to 1100.

Mr. Robert Warne recounts his first attempts and difficulties of merchandising Miss Joaquim blossoms in 1941, the same year that on Lei Day he received a \$25 prize for a lei made of Joaquin blossoms. There seems to be no question that at this period some of the Hilo growers also had begun the propagation and merchandising of the Vanda Miss Joaquim.

EXPANSION
SINCE 1941

The expansion of the orchid industry since 1941 carrying with it the tremendous development of other floricultural items particularly the anthurium, ti, croton, ginger, heliconias and wood roses is so recent it needs no recounting. The recent war, a ready mainland market and speedy airplane transportation have enabled commercial growers to expand rapidly and have induced many others to enter the field both as amateurs and as small businessmen. Together they may be numbered in the thousands.

Orchid growing is no longer the rich man's hobby but enriches the life of thousands of interested and enthusiastic growers.

Thus the growers, the materials, the climate, the enthusiasm, the transportation facilities, and the ability to grow the plants and flowers, are all present. It remains for the future to reveal the ultimate stature and importance to which this new industry will attain. The threshold of the third phase of the development of this new and robust industry, that of attaining the status of a basic and stable industry, is here. This clinic, emphasizing as it does the packaging, shipping, and merchandising of floricultural products for mainland markets is ample proof of this.

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BENEFITS FROM BREEDING

H. Kamemoto

IN HAWAII We are all aware of what breeding can do and has done for our rapidly expanding floral industry. We need look back only a few years at the vanda and dendrobium species of orchids in existence then, and compare them to the hundreds of hybrids of today, many of which are much superior to the original parental species. Then, too, from the first pink anthurium plant brought in to the Moanalua Gardens, we have today vastly improved types ranging in color from white to pink, red and orange. These are the results of the efforts of both amateur and commercial flower growers who held an active interest in breeding for new and better forms.

THE FIRST CROSS The first hybridization of flowers has been credited to Thomas Fairchild, who in 1717 crossed a carnation and a Sweet William. The hybrid was intermediate in characters of the two parents, and was a mule, or completely sterile. It was about that time that sexuality was determined in plants--that there were two essential parts in the flower, the pistil and the stamen, and that pollination, or transferring the pollen to the stigma, was necessary for hybridization. Once this fact was established, countless amateurs undertook breeding work within a group of plants that has much appeal to most people--flowers. By crossing flowers at random and subsequently selecting the better types, thousands of varieties have been produced.

MENDEL'S LAWS In 1900 the science of genetics was founded upon the rediscovery of Mendel's laws. Since then much knowledge has accumulated, not only in genetics but also in a closely related field, cytology, and the combined field of cytology and genetics known as cytogenetics. Various breeding methods have become established. If we realize the fact that many of the past breeders have produced countless new varieties without the knowledge of genetics and cytology, we can indeed hope for great progress if we take advantage of the information on hand.

Let us consider some of the basic information that may be utilized for greater profits from breeding. First, how are certain characters inherited? Let us examine a case of simple Mendelian inheritance, as exhibited in the flower color of *Asystasia*. When a purple-flowered plant is crossed to a white-flowered plant, the progeny will be purple-flowered. Purple in this case is dominant over white. Now, if the hybrid is selfed, the second generation will show both purple and white, in the proportion of 3 purples to 1 white. This second generation is the segregating generation. If the hybrid is backcrossed to the purple parent, the progeny will all be purple; but backcrossed to the white parent, a 1:1 ratio

of purple to white can be expected. This is simple Mendelian inheritance. If the mode of inheritance is known, it becomes an easy matter to reproduce the character at will. Not all characters, however, are inherited in such a simple fashion. Two pairs of genes may affect a given character, in which case, instead of a 3:1 ratio, the segregating generation may exhibit a ratio of 9:3:3:1, or a modification of this. And, frequently, many genes are involved, which complicates the picture somewhat, but this need not concern us here.

HOW AND WHAT TO CROSS With this background of the knowledge of simple Mendelian inheritance, how would you go about combining a good character of one plant with a good character of another plant? Obviously, the first step is to cross the two. But what happens if both of these characters happen to be recessive? That is, instead of getting the two good characters together, both poor ones are combined. Many breeders would get discouraged at the results and immediately discard the hybrid. A student of genetics, however, will do otherwise. Did we not see earlier, in connection with *Asystasia*, that the succeeding generation is the segregating generation? Although the good characters may be masked in the first generation, by carrying the apparently valueless hybrid another generation, the plant that you set out to get--the recombined product--may result. Much valuable breeding material has been lost in the past in the discarding of the first generation hybrids that did not measure up to the breeder's expectations.

Let us take another case. Suppose that a cross between *Vanda sanderiana* and *Vanda coerulea* gave a superb progeny, *Vanda rothschildiana*. You are interested in getting more of this type, so you self a good *rothschildiana*. By so doing, will you get what you want? Probably not. We have seen that the hybrid when selfed will give the segregating generation. The segregants here can be expected to range from *sanderiana* type on the one extreme to *coerulea* type on the other. In this instance, instead of selfing, the correct procedure would be to go back to the two parents and remake the cross in order to obtain the more uniform progeny.

Anthuriums have rapidly become an important export item. As mentioned earlier, breeders have done a good job in producing the beautiful plants now in existence. It is the general opinion, however, that the whites run much inferior to the reds or oranges. Breeders of anthuriums have found that when a white is crossed to a red or an orange, invariably types other than whites appear. In the quest for good whites, breeders have discarded the colored hybrid, and instead have chosen to cross inferior whites to produce better whites.

Again, in this case, it seems that breeders are throwing away valuable breeding material in their first generation hybrids. A cross between a white and a good red and subsequently recovering the whites in the second generation will probably result in superior whites in a much shorter time than by continually crossing inferior whites and selecting the better ones.

KNOW YOUR CHROMOSOMES Another aid in breeding is the knowledge of chromosomes. Chromosomes are found in the nuclei of cells and are the carriers of heredity, for genes which determine characters are located on these chromosomes.

Many plants carry two sets of chromosomes, one set derived from one parent and the second set from the other parent. Plants with two sets of chromosomes are referred to as diploids. In ornamentals, polyploids which have more than two sets of chromosomes are not uncommon. Polyploids, especially tetraploids, are frequently characterized by increase in flower size, thicker and broader petals, greater vigor, and extended blooming season--all important factors to the flower grower.

In cattleya orchids, polyploids, including triploids with three sets of chromosomes and tetraploids with four sets of chromosomes, are much more desirable than the corresponding diploids. Practically all of the present day award winners fall into these groups. We know also that triploid cattleyas are highly desirable for cut flower production but rather useless for breeding purposes because triploids are highly sterile. The triploid nature explains why, in many pedigrees of orchids, a blind alley is reached. Knowing this information on ploidy in orchids, the trend in breeding is to locate good tetraploids and utilize them in crosses. Crossing two tetraploids will give more tetraploids, while crossing a tetraploid to a diploid will result in triploids that are desirable for cut flower production.

Polyploids are found in plants other than orchids. The garden irises, before the turn of the century, were predominantly diploids, but now tetraploids have replaced practically all of these diploids. Among cut flowers, tetraploid snapdragons and tetraploid phlox have been introduced into the trade. These are results of artificially induced doubling of chromosomes with a drug called colchicine. Tetraploid Easter lilies and carnations are about to make their debut. The future awaits other introductions of polyploid ornamentals, and colchicine and polyploidy will no doubt play important roles in the further improvement of flowers.

BREEDING PROGRAM It may be desirable to go a little deeper and discuss the principles of plant breeding involved in the production of uniform hybrid snapdragons, or the production of double-flowered petunias, stocks or carnation, the production of rust-resistant snapdragons, wilt-resistant asters, etc.; but time will not allow this. It should be emphasized here, however, that equipped with the fundamental principles of genetics and plant breeding, one can begin to plan his breeding program and arrive at the final results much quicker than by crossing plants at random or in a "hit or miss" manner.

CONSUMER DEMAND The flower breeder, in order to plan his breeding program, must know what he is breeding for. Is it a certain color that he is after? Is it fragrance? Is it size? The aim in breeding is determined through several factors, but, perhaps, the demands of the consumer carry the most weight, for the ultimate test of a product is consumer acceptance. In this connection marketing and consumer research assumes importance, and we are fortunate enough in having had such studies initiated. From these studies we learn that the season of bloom is of great importance. There are greater outlets for flowers if they can be timed for certain occasions such as Christmas, Easter, Mother's Day, and Memorial Day. Our products can be moved during the winter and spring months, but will face a glut during the summer months. A case in point is the Vanda Miss Joaquim orchid.

Then, of course, uniformity of product is desired. One of the reasons why Vanda Joaquim experiences such popularity is its uniformity. In order for the customer to know what he is getting, particularly through mail or phone orders, the product has to be uniform.

What are the colors that are desired? Are red anthuriums in greatest demand? Or will the softer shades be better? What size, form and texture should we breed for? These can be partially answered through marketing studies.

The market economist tells us, too, that fashions in flowers change as do women's dresses and, therefore, the industry will always be looking for novelties. It is up to the breeder to produce these new products.

TRADE The flower breeder must also consider the claims of the wholesaler,
DEMAND retailer or shipper. Such factors as size, shape, weight, keeping quality, etc., may be involved. A good illustration of how shippers determine what is acceptable is offered in the shape of the spadix of anthuriums. In order to conserve as much space as possible in shipping anthurium flowers, the shippers dictate that instead of a upright spadix, a spadix curving with the spathe should be produced. Breeders, then, should comply with this. For bulky flowers such as the bird-of-paradise or heliconias, those with slender stems and consequently with less weight may be desired.

BREEDING Now let us look at it from the grower's standpoint. What he will
FOR PROFITS attempt to grow is something from which he can realize a profit; the gross return must exceed the cost of production. Many factors will affect this, but we will limit ourselves here to only a brief discussion of two important factors in connection with breeding. First, the total yield of flowers. Flower breeders have not given enough thought to yield, for frequently flower color, form, texture, etc., have taken precedence over total production. This has been the case with anthuriums. If we should compare the flower producing capacities of anthuriums, we will find that there exist inherent differences--some plants produce as few as four flowers per plant per year while others produce as many as seven or eight flowers per plant per year. An increase of only one flower per plant per year will mean a tremendous increase in profits, especially with a sizable planting, and we can imagine what an increase of as many as four flowers per plant per year will do. Thus breeding for yield, at least in anthuriums, will be a very profitable field.

Lastly, we will have to mention diseases. We all realize how troublesome diseases can be and how they tend to decrease profits. One of the best controls for a disease is to plant varieties resistant to that disease. Breeding for resistance to diseases, however, is not easy and often requires trained personnel in the fields of both plant pathology and genetics. However, a plant breeder without the more specialized training can at least select against plants extremely susceptible to a disease.

With a fundamental knowledge of the basic principles of genetics and cytology, and with a definite goal in breeding, determined by the various phases of the floral industry, the flower breeder can hope to improve on present varieties as well as to create new ones which may result in greater profits for all.

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THE ROLE OF DISEASE IN PRODUCTION AND MARKETING OF ORNAMENTALS

J. W. Hendrix

(Dr. Hendrix's talk was given extemporaneously, and about half of his time was devoted to colored slides on plant diseases. The narrative portion of his talk was recorded but destroyed accidentally, so that we have no written record of what he said. In the panel discussion following Dr. Hendrix's talk, a number of questions were asked Dr. Hendrix, and his replies more or less provide a summary of his address.)

THE SECURITY OF THE COMMERCIAL FLOWER GROWER

O. Ben Haley, Jr.

CONFESSION May I make a confession? I worked hard on my talk before coming to Hawaii--I knew exactly what I should tell you. Upon finishing the three-day floral tour you arranged for us before this clinic, I frantically re-organized my whole talk. It's a bit informal but what I had to say just didn't apply--I just did not understand and comprehend your problems beforehand.

HISTORY OF THE
COLORADO
CARNATION INDUSTRY

I have just one message, and I believe the best way I can bring it to you is to tell you how closely the problem here parallels the problem and history of the Denver carnation grower.

The carnation industry in Colorado is some 30 years old. The company for which I work was organized around 1910, and started shipping interstate some years later. After the war, that is, World War I, our business grew very fast; new greenhouses went up; sales were there for the asking; demand was ahead of supply and everything was lovely. Then, came the depression and demand fell off. Meanwhile, we had expanded production without giving any thought at all to markets or to investing money in the development of the markets. And, so in 1932, '33, '34, and '35, we saw complete chaos in the Colorado carnation industry. Our carnations were sold for less than the cost of packing them. Carnations were being sold in Denver on street stands for half a cent or less to the public. We shipped carnations on consignment into markets outside of Denver, and they didn't bring enough to pay for the transportation costs into those markets. We were in complete chaos, and the industry was about to fold. Fortunately, we had a few men who were perseverers, who could plan, and who could organize and get the rest of the growers together.

CHAOS What happened in 1934 and 1935? The growers finally reached the point where they hadn't paid their coal bills for more than a year, and winter was coming on. Without coal at that time, our greenhouses would freeze--they still freeze, but we use gas to heat them now. One of the leaders of the carnation industry went to the coal companies and said, "We need coal to get through this winter. We haven't any money to pay for it; but if you will collectively sell us coal, we will collectively pledge our crop to pay for it some six or seven months from now." The coal companies took us up on the offer, and that is how the growers in Denver started working together. Chaos forced them to do it. Before that, a grower was not welcome at another grower's place. Today I can go to any grower in the Colorado area, and I am welcomed open-heartedly. If we growers get into trouble, we run from one to another, and believe me, we are very well acquainted with the diseases you just saw on the slides. We have ideal conditions in Denver to encourage the spread of these various bacterial and fusarium diseases that you have here in your fields. I've seen greenhouses literally wiped out by the spread of these diseases, which are encouraged by lack of sanitation and improper growing methods. After our people started working together, the poor grower would ask the good grower, "How do I do this better?" and the good grower would tell him, and we started to have plans and aims.

Our first aim, of course, was to pay off the coal bill. Later aims were the development of markets; the development of a sales program; and the development of a promotion program. Finally, we came to the development of a research program. Presently, we have a research program going on at the college similar to

what you have here at your college. The industry pays for several fellowships each year to help finance studies of these various diseases and ways and means of improving our growing techniques. But, we had to go through chaos to bale ourselves out.

MY MESSAGE If I have any message for you, it is to tell you that collectively you can do many things; alone, you are going to be small time operators.

We heard this morning that the islands are presently doing 2 million dollars worth of floral export business yearly. I believe it when they say that this can be doubled; I think it can go much further than that. But I believe that you are going to have to do it collectively. Do you people have to go through chaos? Do you have to go through bankruptcy? Do you have to have your crops destroyed or not watered or not cared for because you no longer can sell them? If you will get together, develop a common plan, allow yourselves to be joined by your natural leaders, I'm sure that you will be on the way toward this goal which is not too ambitious, four or five--eight-ten million dollars worth of export flowers per year. But, you need to do it together. I can't tell you how to do it. I can tell you to develop the will to do it, and then seek those in the legal profession to tell you how to do it.

ATTAINING A DEGREE OF SECURITY They gave me a tough subject, "The Security of the Commercial Flower Grower." I looked in the dictionary to find out what security really meant. Webster defines it as the state of being protected and not exposed to danger. Even the government can't do that for us. So I can't tell you how to attain perfect security. I can tell you some of the ways to attain a degree of it. Keep in mind these things while you are working on your joint efforts:

1. You must do a good job in producing--all of you. By that I mean not only in crop culture, but in research, such as how to time your crops for market. You must collectively time your crops for market. You must collectively plant according to market demands with respect to colors and varieties and quantities. We could grow tremendous quantities of sweet peas on the Mainland. They are not too difficult to grow. But there is only a certain market for them. There is no point in overproducing on a market before you first develop the demand for that product. So do a good job in producing according to a plan.

2. Do a good job of grading. That's very important. Do a good job in grading to constant known standards. These standards must be known to you and they must be known to your customers--the recipients on the other end. I was telling some of the people in Hilo of our experience in Colorado. We have found that almost every carnation grower says that his carnation is the best grade. That's not necessarily so. We have set up four major grade standards in Colorado for carnations. We call them select, fancy, standard, and short. Some growers get most of their merchandise in the top three grades. Some of them get most of their merchandise in the bottom two grades. But we endeavor to ship constant quality from our market so that the consumer on the other end knows what to order and what to expect. In the summer time--presently--the top two grades are not available from the Denver Wholesale Florists Company--the company for which I work. We frankly tell our customers, "We can't grow that good merchandise in the summer and we are withdrawing the name and the prices from the market. We will be back in the fall, but meantime, we are sorry, but you will have to be satisfied with the lower grades," which of course sell for less money.

3. Next, sell and promote. You have to sell and you have to promote collectively, if you are to be big business. You are on the verge of it now. You must develop a sales plan, without having each of you working in a different direction. I can't tell you that the best market for the vanda joaquim is the retail florist. I can't tell you that the best market is the supermarket. But, I do believe that all of you should be working toward common goals. Perhaps you should say, "We will save the vanda joaquim for the non-florist trade, and we will save our other flowers for the florist trade." If you'll work together that way, then your efforts will pay off much more fruitfully than if one fellow says "I won't sell to the non-florist trade," and another fellow does. You have the poor retailer on the other end in a bad way, and I think Eddie Goepfner is going to tell you something about that tomorrow.

4. And, lastly, deliver the goods. Don't let transportation or packaging bugaboos get in your way. I want to tell you a little bit about that. We in Denver have transportation and packaging difficulties as you do. Our average customer is over nine hundred miles away from us. Yours is a bit farther. By length of time our average customer is a day and a half away from us--about the same as yours. As I said the other evening, 53 percent of our carnations are shipped east of the Mississippi River, and over half of them go to customers who buy from us on a regular standing order the year-'round. You will find that the transportation companies will work with you if you'll work together with them. They have their own research labs that are very anxious to develop a better method of shipping flowers. But they have to have a group to work with. You'll find too that your educational institutions, such as this university, will tackle any phase of this business for you, if you collectively ask for it. You have a major packaging problem out of here and you have a major transportation problem. But they shouldn't lick you. We have had to break away from rail express to a large extent this last year. My company has invested over \$50,000 in refrigerated tractor-trailers, a new experiment in delivering flowers to our customers. We are making regular scheduled shipments now into Dallas, which is 800 miles out of Denver, and into Birmingham, which is 1400 miles from Denver. Those shipments are made so that they hook up with other carriers at the other end. We must operate to a split-second schedule. That is a little bit tougher problem in some ways than you have.

TREMENDOUS DEMAND You have a tremendous demand for your flowers, and I want to tell you how I know that. Every year at the Denver Wholesale Florists Company we have a design school in October. It is a two-day clinic, similar to this, and we ask all of our retail customers to come to it. Last year we had more than 500 retail florists from 300 different stores located in 18 different states at our little convention. Willard Crane, who is known to many of you, was master of ceremonies at the convention. We need a new theme each year for our design school in order to draw people back. Last year we decided to introduce and promote Hawaiian flowers and foliage. We send out a weekly price list to 2300 customers. On September 4 we first announced on the front page of our weekly price list, (demonstrates) "direct to Denver Wholesale Florists from Hawaii for you, wonderfully beautiful flowers and foliage for distinguished floral arrangements," and we gave a prime position on the inside to exotic flowers from Hawaii. We carried those announcements through September 11th, 18th, 25th and well into October until just before the design school. Prior to the design school we were selling very little Hawaiian flowers and foliage. At the design school we had floral artists work with your flowers and foliage and we developed

an immediate demand for them. That demand built up, until by the first of December our wholesale house, which is just one of many in the country, was selling almost \$100 worth of Hawaiian flowers and foliage a day. That is how I know that there is a tremendous dormant demand for your foliages and many of your flowers on the Mainland. But I must also tell you that you must come over and tell us how to use them. There is a sad sequel to this story. As of now, the Denver Wholesale Florists Company is selling no Hawaiian flowers and foliage with the sole exception of vanda orchids. The reason--there was a breakdown in communications somewhere between the grower and our ultimate consumer. We had to discontinue handling them. I am very sure, however, that the situation will be corrected before we leave the Islands.

A PROMOTION An idea came to me recently as to how your flowers might be promoted.

IDEA I'm certain it would give you some security. The design schools I spoke of a few moments ago, occur at regular intervals and in various locations throughout the Mainland. They offer a splendid opportunity for you to promote your products to the retail florists. If you would select the large design schools and send a native Hawaiian to show the florists who come to that design school how to use your flowers and foliage, I believe it would be worth your while. It would certainly create a lot of interest and a lot of demand for your flowers and foliage. An ideal situation would be a man and wife team. I can imagine a native Hawaiian girl, in her native or semi-native costume (laughter) showing the retail florists how to work with your flowers. The man could have the statistical data about the various crops, such as when they are available. For example, I didn't know that you could get ti leaves all year around. I didn't know a lot of things until I came here, and there are a lot of things I still don't know. How can we buy? Can we buy three red and two yellow ti leaves and some of those croton leaves? We don't know too much about all of those things. Have your man be the salesman and his wife the arranger, and personally I think you would steal the show. I do know that those design schools offer tremendous opportunities for promotion.

CONCLUSION So grow, grade, sell and promote, and deliver your products. Other industries have solved the same problems that you have. I remember my mother telling me that as a girl she received one orange a year, and that was in the toe of her stocking at Christmas. As a child, I frequently had half an orange for breakfast. My kids aren't happy unless they have the juice of two oranges every morning. (Laughter) Now what's happened? There has been a tremendous promotional effort put behind this orange industry. And how did it happen? Most of the California orange growers got together and formed what is known as the sunkist group. They started out to grow collectively, to grade collectively, to produce collectively, to sell and to deliver collectively. Look at the demand for oranges today. The orange people built it up from one orange a year, fifty years ago, to where my kids--and I have a lot of them--want the juice of two oranges a day. Now, it isn't because the kids change, it is because somebody did some promotion.

GROWING SESSION PANEL

Moderator: J. Scott Pratt, Chairman, Industrial Research Advisory Council of Hawaii.

Members: Robert Warne, Takumi Kono, Haruyuki Kamemoto, John H. Beaumont, J. Walter Hendrix, O. Ben Haley, Jr., Henry A. Bess, Charles Powell.

Pratt: I would like to start this final panel off by asking Dr. Kamemoto a question. With all of the breeding work that has gone on, isn't it about time, Doctor, that we start selecting quality and not waste time on a lot of the poorer plants we have in our gardens?

Kamemoto: Yes. Breeders should not fool around with the poor stuff, but we should realize the fact, too, that not all good plants are going to produce good plants. And if you are in the breeding game and realize, say, 10 percent good ones, I would say that you are very fortunate indeed. It is very important, therefore, to be able to distinguish between the good and the poor ones, and if you have the poor ones just don't fool with them. But of course, with all the knowledge that is accumulating in the various phases of breeding, we can begin to plan our breeding and arrive at better results in a much quicker time than in the present random manner of breeding.

Pratt: Thank you, Dr. Kamemoto. I meant not only those doing amateur breeding but those commercial growers who are doing a lot of the work themselves and have, for instance, in their anthuriums a lot of those poor shapes. I think we should strive for quality and get rid of a lot of this poor stuff. Now may I have a question from the floor?

Q: I have a question for Mr. Haley. I'd like to know what regulations the carnation growers have and were they self-imposed or are they government imposed?

Haley: In answering this question, I am not speaking for the Colorado flower growers. I am speaking for the Denver Wholesale Florists Company-- that is the group of 48 growers who employ me. Our growers work under a growers' contract, and under rules and regulations that have been recommended by those who run the company and approved by a growers' committee. When growers violate the rules and regulations, the management of the company asks the growers' committee to take disciplinary action. That way, we are able to keep the growers fairly well in line. Usually the violation will be of a nature that can be very easily corrected. For example, the grower is out of balance for color, or out of balance for crop timing. Those conditions can be corrected very easily because we see them in a hurry through our company men, who contact each of these growers one or more times a month. We know fairly well what the growers are doing. Does that answer the question?

Q: That answers it only partly. How do other growers get into your organization--or is it limited to these 48?

Haley: Other growers are welcomed into our organization. In order to get in they must petition for membership. Membership includes owning stock in the company. Before they are allowed to buy stock, the growers' committee, which is a committee selected by the growers

themselves, has to certify that this prospective grower is producing quality comparable to or above the average merchandise being presently produced by the houses. If the grower wants to join, we want him with us. It is a lot better for us to have that merchandise to sell than have it sold in competition with us. By buying stock and signing a growers' contract, the grower becomes one of the regular members.

Q: I want to ask you if the price of carnations varies--or is it the same all-year-round?

Haley: Again, I speak for the Denver Wholesale Florists Company and not for the Colorado flower growers association. We at Denver Wholesale have sold carnations for the same price for the last four years--year 'round--16¢ for the top grade, 14 for the next, 12 for the standard, and 8 for the short. As I told you, we do not try to kid the consumer in the summer time by getting him to take the top grades when they just won't meet grade standards. So you might say that, in the summer, we have a 12 and 8 cent price, and in the winter we have a 16 to 8 cent price. Actually, if we have a 16-cent quality in the summer, we have a 16-cent price. Those prices have existed now for 4 years.

Q: Is that for one carnation?

Haley: That is for one carnation. (Laughter)

Q: Are the growers limited in their output?

Haley: No, the growers are not limited in their output. But, remember that our problem is quite different from yours. A grower to increase his producing area, say one acre--43,000 feet--would require an investment of more than \$100,000 because of the greenhouses, boiler plants, benches and so forth. Our growers do not expand like yours do. (Laughter) Ours is a long-term, slow expansion program, and we are very fortunate to have that. You have a very hard problem where the growers can expand very rapidly--many fold in one year. You have a problem there.

Sykora's
Comments: I think there should be some comment made here, and I believe Mr. Goepfner has something to say on some of Mr. Haley's statement. I'll give Mr. Retailer a chance to make the remarks.

Goepfner's
Comments: I think it should be explained why you are able to sell your carnations for 16 cents--the quality of your product is associated with your location, which is perhaps the best place in the U. S. to grow carnations.

Haley: That's right. The Colorado product is a superior product and is acknowledged as such. Our carnation, for most of the year, is better than that grown in any other area. That's shown by the fact that we will win from 65 to 90 percent of the prizes at the annual carnation shows. Our carnations keep better than our competitors', and they are graded better than our competitors'. I'm talking now about non-Colorado carnations. (Laughter) In shipping to the South, it takes three or four days en route, and when taken out of the package our carnations will last ten days or two weeks in the

retail florist's ice box. That sounds like an exaggeration, but I think Jim Sykora will admit that he has seen our carnations last from ten days to two weeks in a retail florist's ice box.

Sykora's Comments: That's not only true, but Denver carnations have been shipped into Havana, Cuba, very successfully.

Haley: We do have a definite advantage over the rest of the country. But you people here have some advantages; find your advantages and exploit them. You need just a very small advantage over your competitor and you're set. There is one other thing that we have done. We have spent a tremendous amount of money promoting the Colorado carnation. I'm trying to hold back on that; it's my talk for tomorrow. (Laughter)

Q: Mr. Kawahara, I judge from your comments that your work with these Bonsai (dwarf trees) has been mostly with growing--have you done any packing or shipping to the Mainland? (Mr. Kawahara displayed bonsai (dwarf trees) and commented on their culture. His comments are not reproduced in these proceedings--Editors.)

Kawahara: I got hold of some lava rock and by using a carbide drill I made a hole in the lava rock large enough so that a couple of plants could be planted in it. I shipped those rocks to New York, New Orleans and California, but apparently the people there did not know how to use the rock to advantage. The roots will go right into the rocks and convert the plant to a semi-dwarf status. The reason why we cannot ship out dwarf trees from our place is because no soil can be shipped out from the Territory.

Q: I'd like to ask Mr. Warne if limiting the output of Miss Joaquim flowers in the summer warrants the destruction of the spikes, and if the production increases in the winter and spring months to make up for it.

Warne: If you break the spikes from the Joaquim flowers up until the last week in September, they will usually throw a new spike which will start bearing about the first of December. A new spike, as all of you know who raise Joaquims, has three or four flowers very quickly on the stem while an older spike will have one flower and then in about eight or ten days another. You will increase your Christmas production very materially up until about the end of March. If Easter comes in March as it did this year, you come out very much ahead if you break your spikes up till then, but, if Easter comes in April, you are just as well off not to break spikes. If you have a heavy demand during Christmas, New Year's, and Valentine's Day, it is a help to break the spikes; otherwise it is not.

Q: Mr. Haley mentioned the need for grading of flowers. I would like to ask Mr. Powell of the Territorial Board of Agriculture and Forestry what they have done in this respect.

Powell: We have not done very much on grading. We have written up a couple of tentative grades which might be used, but they need a lot of changing before they will be of any value. That will require suggestions from growers and shippers and we will be glad to work with

them whenever they want to have a grade. We expect these grades to be permissive in character, that is, we want to make up the kind of grade that will be the most value to the industry.

Q: I have a question for Mr. Kono. With maile becoming scarce, will it grow here under cultivation?

Kono: You have shocked me there. However, I cannot say no to that question; if I did it would be a fallacy. Judging from past agricultural progress, I might say that 20 years ago it was considered difficult or impossible right here in Honolulu to propagate macadamia. But what is macadamia propagation today? People say it is duck-soup to propagate. In other words, science has progressed. Going back to your particular point, I would say that maile can be cultivated, provided you bring the forest environmental conditions down to your back yard. It is a subject that has been thought of and talked about by a lot of people. You are all familiar with Mr. Vance--he has a project in the hills of Moana Loa--and once upon a time his pet project was cultivated maile. For Kulani (prison) to go ahead and produce maile is very easy; but if maile plants are brought down to your Kalihi area conditions or Kaimuki conditions, they will require different care and will be difficult to maintain.

Q: I should like to ask Dr. Hendrix to tell us what to do about the spots on orchids, especially cattleyas. (Laughter)

Hendrix: To be frank, the best thing to do is cut off the leaf. There are new fungicides being developed which we feel will actually eradicate the causal agent of those spots. They will not cure the spots--those spots will forever be there--until that leaf is shed naturally. But, at least you'll have the advantage of knowing that the cause is no longer active. Those fungicides and bactericides are not yet available. Until they are available, I would suggest that for the sake of the healthy plants you have in the neighborhood of diseased plants, it would be far better to snip those leaves from the plant and destroy them.

Q: Dr. Kamemoto, you said that sometimes you are very fortunate if you get 10 percent of desirable types from a cross. That makes the costs almost prohibitive. If I have to throw out 90% of the plants, who's going to pay me for the loss to make it worth my while?

Kamemoto: That all depends upon what you are after. For instance, you know very well as an orchid breeder, if you are after just one superior thing, an out-of-this-world cross, then one bloom will pay for all of your other operations. (Laughter) For instance, how much did one plant of Cattleya gigas Firmin Lambeau sell for? Just one plant alone may pay for your entire operations. Of course, if you are after cut-flower production, then you have to work for uniformity of progeny. In such cases, I say, in cattleyas use the polyploids; cross your good tetraploids, or those that are known to give good progeny to diploids to produce triploids. Perhaps 90 percent of the flowers may be salable.

Q: What about root-rot of anthuriums?

Hendrix:

There are a multiplicity of root-rot diseases of anthuriums. Unfortunately, I don't know the one to which you are referring. However, I can say this: Recently, the Experiment Station has undertaken to survey the diseases of anthuriums. A number of them have been identified. Right at this moment work is under way to control the more important of these diseases. If you would care to visit our greenhouses right after this session, we would be very happy to show you what we are doing and to talk over any of the particular diseases you have in mind.

Q:

I would like to ask Dr. Bess what the Entomology Department is doing in the way of insect studies and control.

Bess:

We aren't doing too much at present because we haven't had the pressure put upon us. (Laughter) However, we are quite interested in the systemics--that is, those insecticides that can be applied into the soil, or sprayed on the foliage. Then insects, especially the sucking ones that feed of the sap, will be killed. We feel that there is a great possibility for the use of systemics with ornamentals. As you know, they might not be as desirable if used on an edible crop. We are doing some preliminary work with systemics. As far as I know, if you really follow the directions as written, and with all the array of insecticides we have at the present time, I believe you can control all of the known insects.

Q:

Mr. Haley, I was interested in the answer Mr. Powell gave to the question of grading, when he said, "we." Inasmuch as he is a governmental employee, I presume that the government is working on standards and grades for flowers and foliages. I understood you to say that standards and grades should be developed by the industry. Is that how you developed them in Denver, Mr. Haley?

Haley:

Yes, it is. We developed our own. We did it for two reasons: first, to help us sell our product, and second, because we realized that if we didn't, we would have an outside agency do it for us. We didn't know how to do it right, so what could the outside agency do? We have been working with these flowers for years, so we could come nearer saying what are the best standards than could an outside agency. Furthermore, after we had set them up and had seen our mistakes we could easily correct them. The grade specifications, therefore, are somewhat flexible--but they are getting stricter every year. Four years ago we would allow diseased flowers in the short grade. Now, they are not allowed in the short grade. The short grade has all of the attributes of the better flowers, and more expensive grades, except that it includes smaller flowers with a short stem.

Q:

Would it be your recommendation then to the flower growers and shippers of Hawaii to work collectively to develop our own grades and standards?

Haley:

If you can get the cooperation of the University--fine. If you can't, you'll have to work by yourselves. We didn't want grades set up that would affect all carnation growers in the country. I would recommend that your leaders go to your college here and let them help you develop the grades.

Q: Mr. Haley, do you feel it is a decided advantage for a grower to have a financial interest in the marketing agency like you have in Denver?

Haley: I do believe that our Denver wholesale houses look after the interests of their growers pretty well. We have the responsibility of looking after the interest of the grower and the retailer. Since we are a grower-owned organization you may think that we have left the retailer on the outside. We have spent a tremendous amount of money trying to serve the retailer well so we can pay off the growers. We are looking after the retailer's interest, too. Mr. Sykora's company, for example, has to do a job selling and merchandising the products of his growers, or he is going to have unhappy growers and unhappy retailers on his hands. It doesn't make any difference, in my mind, how you do it, just as long as you have good men doing it, and they are doing it according to an approved plan.

Q: Does the grower feel more security in your operation being a financial partner?

Haley: Possibly he does feel more security in our operation than if he did not have the financial interest in it. He should, because he brings us all of his merchandise; in other operations in the country the grower takes his merchandise to several wholesalers trying to develop security. I really believe that by taking it all and by living with these same people year after year, the grower feels more security than if he dealt in the other type of market. I cannot answer your question satisfactorily because it will depend upon the men you work with. If you have good wholesalers, they must have the interest of the retailers and growers in mind, because that is the only way they are going to make money too.

Q: Is your organization a true cooperative?

Haley: No, ours is a grower-owned corporation, but not a co-op. Our organization was set up, incorporated, and owned by three people; two of whom were the managers of the company. In 1946 the growers bought all of the stock of these men and split it among themselves in proportion to their production areas under glass. That happened a long time after the carnation industry started climbing uphill.

Q: I wish to clarify a point--your firm is not the only one in Denver wholesaling carnations?

Haley: There are four other wholesale houses in Denver. We are one of them and produce and sell about 42 percent of the flowers grown in Denver.

Q: I should like to direct this question to Dr. Hendrix. The slides that were shown this morning are something we should know more about. For several years now everytime we go to an orchid society meeting we have been hearing, "we think this is a virus, or the so-called virus"--you all know what I mean. These diseases we have seen on the slides are something we recognize in many of our collections. I think that it is something that needs a great deal of pressure brought to bear upon those who are able to help us. The question I wish to put is:

How much closer are you to finding out whether these are viruses or aren't viruses? (Laughter) Or, are we going to go on for the next five or ten years hearing exactly the same thing we have heard this morning?

Hendrix:

The field of orchid pathology is in its infancy, in fact, the entire field of plant pathology is in its infancy. When you realize that it was not recognized that a fungus or bacteria could cause a plant disease until around 1880, the tremendous growth in the volume of literature on plant pathology is phenomenal. Most of that early work had to do with the diseases of field crops--wheat, corn, barley, flax, on vegetable crops--tomatoes, beans, lettuce, potatoes, and it has been only recently that pathologists have turned their attention to the ornamentals. If you should go to a library on plant disease information, you would be astonished at the lack of textbooks on that subject. You would be further surprised that most of the work dealing with these diseases of ornamentals has been on irises, roses and so forth. Until just two or three years ago there was no information on the diseases of orchids or the virus diseases of orchids. I can recall only four publications describing new virus diseases of orchids and three of them have been in the last year. You can rest assured that this university is far ahead of any other Experiment Station in the study of orchid diseases, with the exception of the University of California. For example, the color-break disease was at one time thought to be due to the use of too much D.D.T. Dr. Murakishi of the University of Hawaii established the fact that it was due to a virus; on the basis of his information the Board of Agriculture and Forestry has gone to work, and it has done a good job in eradicating that disease from the Territory. And while you may in the past 10 years have heard the terms, "virus-like diseases," I believe that in the future, when you use the term "virus disease", it will mean more. You are going to be able to pin-point the meaning of those words, you're going to be able to refer to a specific disease--a specific virus. Thank you.

Q:

The point I wish to make when I say, "Perhaps we ought to use pressure," I mean our pressure in supporting this study. We know that there is more going on here than there is in any other place, but do you need more help from us? Do you need money? Do you need equipment? Do you need things which will push this ahead further so that we will get the answer sooner?

Pratt's
Comments:

I might comment on that as chairman of the Territorial Industrial Research Advisory Council. We have several programs under way, and have already appropriated money given us by the previous legislature, for several grants on studies for flowers, foliage and ornamentals. Mr. Rada's study and Dr. Hendrix's work have been financed through our Territorial Industrial Research Advisory Council. This last legislature provided an additional \$200,000 for research and some projects have already been authorized. However, if you growers have problems that you feel require research in the growing of plants or in marketing, that is what IRAC is there for--anything to stimulate the development of our Hawaiian business. We members are not paid members; we devote a great deal of time to IRAC work, but we would like to know what problems there are and where we can help. In fact, we have one project now in which we are studying or making a summary

of all the research that has been done throughout the Territory in the last 10 years. The reason is that the law, Act 217, which was just passed to carry on the work, stated that we cannot duplicate research that has been done previously. In other words, we have to assure ourselves first that we are not duplicating research work already done. If there has been no previous research, and if there is no duplication, we can grant funds to individuals or organizations who are prepared to do the work. We look for great things to develop in the next couple of years as these problems are worked out. Please let us have your problems. Our office for the time being is with the Hawaiian Economic Service, on the 6th floor in the Young Hotel Building. Mr. Jagger's and Mr. Craig's office has handled all of the administrative work.

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SPECIAL FEATURE

Shigeru Kawahara, Honolulu nurseryman, discussed the culture of bonsai (dwarf trees) during the growing session. He explained the many methods of producing these trees, an art handed down through generations of Japanese artists. Several of the trees he exhibited in the lobby of Farrington Hall were many decades old, and had been developed by his father and other family members. Among them were tiny poincianas, hibiscus, pines, and banyans.

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S H I P P I N G S E S S I O N

THE FUTURE OF AIR TRANSPORTATION FOR HAWAII

C. M. Young

YEARS
AGO

As possibly an interesting sidelight on the subject that has been assigned me for this session, I have succumbed to a temptation to quote excerpts from two stories that appeared in a Honolulu newspaper some time ago. One of them said, "Inter-island commercial air transportation will be in effect in Hawaii before the end of the present year, according to the belief of the Director of Aeronautics, United States Department of Commerce, who has for the past ten days been inspecting Hawaii's airports and possible airline facilities." The other, "Hawaii to be the Cross-roads of trans-Pacific air transportation the same as it now is with respect to steamship travel."

The then Director of Aeronautics is your present speaker. The articles were published in the Honolulu Advertiser in February, 1928. Measured in terms of air transportation development, that is practically ancient history.

I have not referred to the press comment with any idea of having you believe that a "crystal ball" guess of 23 years ago in any way qualifies me to discuss today's subject. As a matter of fact, the contrary would appear to be true. Those were the early days in aviation when speculating as to the future of aviation was practically unlimited in scope, and since mere speculation entailed no responsibility, "exports" were always available on the slightest pretext to paint a picture with respect to almost any given situation. I was on the ground at the time and took advantage of the opportunity. Besides, I felt obliged to do something that would appear to justify my trip to Hawaii at Government expense, a trip that I very much enjoyed, and one that has led to my return many times since.

The first thought--that is, Inter-island air service--was not even a guess. All the important natural conditions were present, and suitable aircraft was available. It had already been under consideration by at least one group--and it did get under way the following year. The second idea--the "Crossroads of the Pacific"--was reaching out a bit, but it did seem on the horizon, and it was a happy coincidence that six years later I was invited by Mr. Trippe, President of Pan American Airways, to join the company and assist in proving it wasn't all a myth. Since that time I have watched the whole trans-Pacific theme develop into its present high state of realization.

Now, however, in guessing the future things are quite different. Much experience has been gained, economic values have been determined, and various controlling factors have been recognized. All must be taken into full account in any attempt to responsibly measure the future. Idle speculation has little, if any, value.

PROGRESS With the foregoing in mind, it would appear to be in order to briefly
TO-DATE high-light appropriate aspects of the progress since the start of air transportation in the Pacific.

Pan American inaugurated service to and through Hawaii from the Mainland in November, 1935. It transported only mail and cargo until October, 1936, when passenger service was authorized.

(a) The schedule frequency then was once weekly. Today Pan American alone operates 17 trips weekly between Honolulu and the Mainland.

(b) The flight time then was 19 1/2 hours, with some flights running as high as 24 hours. Today it is 9 1/2 hours.

(c) The one-way passenger fare was \$360 (or at present dollar value, \$676). Today it is \$160.

(d) In 1937 the cargo rate was \$1.67 (at present dollar value \$3.14). Today the regular rate is 71¢, the volume rate, i.e. over 100 lbs. is 57¢, the specific commodity rate on flowers is 30¢, with a 15¢ rate for certain types of flowers and foliage.

(e) In 1937 it required approximately 100 days pay of a skilled worker to pay for a round trip ticket to Hawaii at the then existing fare. Today 24 days pay will do it, a circumstance that is vastly broadening the travel market, and producing greater tourist volume for Hawaii.

(f) In the year 1937, Pan American carried a total of but 561 passengers between the Mainland and Hawaii, of which 296 were destined to or originated in Hawaii. In 1950 it carried 46,902 over the same sector, with 34,731 destined to or originating in Hawaii.

(g) There are now six scheduled transoceanic airlines serving Hawaii--BCPA, PAL, CPAL, PAA, UAL and NWA--and in 1950 they carried a combined total of 91,628 passengers on the Mainland-Hawaii sector, with 70,092 of them destined to or originating in Hawaii.

That generally represents the development of air transportation to and from Hawaii since its inception in 1935, with by far the major portion of it taking place during the past five years--that is, since World War II.

It means that Hawaii is air connected with practically all important points in the Far East and the South Pacific by frequent schedules, and that the American flag carriers now provide a total of 32 services weekly between Hawaii and the Mainland transporting passengers, cargo and mail, plus the schedules of the foreign flag carriers. Air transportation to and from the Islands has come a long way in a relatively short time.

DEVELOPMENTS By the very nature of this Clinic it of course has a compelling
IN FLOWER interest in the larger and further development of the mainland
SHIPMENTS market for flowers. For that reason I should like to review briefly
some of the developments to date in the matter of air shipment of
flowers from Hawaii to the Mainland.

Prior to World War II flowers were sent to the Mainland by air, and in appreciable quantity. For the most part the shipments were leis, orchids and anthuriums from tourists or residents in Honolulu to friends and relatives on the Mainland. Although the number of shipments grew steadily from year to year, it was obvious that the relatively high transportation cost was a deterring factor of consequence, and that there was a limit to the volume to be expected from that source.

Then, too, the Plant Quarantine Inspectors were required to inspect each shipment^{1/}, a circumstance that contributed to delay and uncertainty, thus adding yet another problem in promoting sales. Even so, it was felt that there was a large, unexplored potential market among retail florists for the development of this type of traffic and efforts were made to interest the retailers in the San Francisco area in bulk purchases.

SERVICE Little progress was made for various reasons, among them being the infrequency of schedules--then once weekly--the uncertainty of arrival on a particular day, and the fairly high retail price that would need to be imposed. So it may be said that prior to the war, relatively little was accomplished in the development of flower shipments by air.

During the war period--that is, 1941-1945--no commercial air transport service, as such, existed between Hawaii and the Mainland, so nothing could be done to develop or promote traffic.

SERVICEMEN At the same time, however, thousands of military personnel were stationed at or passing through Hawaii and were being exposed to the beauty and desirability of Hawaiian flowers, which meant that many thousands of relatives and friends on the Mainland who knew little or nothing about Hawaii, and who had never seen its flowers, were hearing all about them. In many cases they actually were receiving orchid and pikaki leis and various other blooms symbolic of the Islands. Potentially it opened up an entirely new vista so far as the flower market was concerned.

PROGRAM This was at once recognized by various marketing agencies in Hawaii, and an investigation as to the feasibility of bulk shipments in quantities sufficient to justify a more favorable cargo rate was undertaken. Pan American was requested to and did participate in a development program, including experimental shipments, packaging, and various tests that resulted in demonstrating that flowers could be transported by air without impairing attractiveness, apparent freshness, or salability.

CARGO RATE AND VOLUME There remained the matter of the cargo rate. In due course, and as a part of the program, a specific commodity rate of 30¢ per pound to the Mainland, by weight or volume, was established by the air carriers together with a 15¢ rate for certain of the larger and bulkier plants and flowers.

In addition, the air carriers devised inter-carrier transfer procedures for inland shipments, instituted a single airwaybill covering points of ultimate destination, and through the cooperation of the Department of Agriculture the individual examination of flower shipments on the Mainland was abolished.

Prior to the establishment of the commodity rates and the active promotion of Hawaiian flower sales on the Mainland, according to Mr. Rada's compilation, the monthly volume was some 3,000 pounds. Thereafter, in 1948, it increased to an average of 20,000 pounds monthly; in 1949 to approximately 30,000 pounds; and in 1950 it exceeded 46,000 pounds monthly--approximately 270 tons for the year.

That was by air freight alone. In addition, there were some 185,000 pounds by air parcel post. Here again, as in air transportation, the development has been rapid and almost phenomenal--and again points the way for the future.

^{1/} We believe Mr. Young means that mainland inspectors were required to inspect each Hawaiian floral shipment arriving on the Mainland. (Editors)

THE Having in mind the impetus to the flower industry generated by the
OUTLOOK presence in Hawaii of the large number of military personnel during the war, and taking into account the 57,000 tourists that visited Hawaii during 1950 and the probably continually increasing number year after year--all of whom become Hawaiian enthusiasts--it would seem that the flower industry has the foundation for a mainland market that with active, coordinated effort could increase many-fold and become a major factor in the over-all economy of the Islands.

Hawaii now has excellent air transport service. Considered in connection with the over-ocean distance involved from all important points in the Pacific, I believe it to be the equal of any of the World. However, that does not mean that it has reached a standstill or that it will not be further improved and developed.

The airlines serving Hawaii are or will be prepared to provide Hawaii progressively with whatever type of service new developments may require--whether in the form of greater frequencies, added cargo lift, or, when available, new and faster aircraft. It involves only the application of the age-old basic principle of supply and demand, and the ever-present laws of economics. They are controlling factors in air transportation as well as in any other business enterprise, including the flower industry of Hawaii, and dictate the type and character of advances that are to be made.

FUTURE It has been suggested that I make some reference to commercial aircraft
AIRCRAFT of the future. So far as the near future is concerned it is not difficult to draw some conclusions. The air transportation industry now has on order approximately \$150,000,000 worth of the modern versions of the type of aircraft that predominate in air transportation throughout the World today.

I refer to such aircraft as the Douglas DC6-B, the Boeing "Strato" Cruiser, the Lockheed Constellation, and the Consolidated Convair. They are fast, their performance is proven, they are efficient, and they reasonably meet the existing economic requirements of the industry. There seems no doubt that they will remain in commercial airline service for at least the normal period of depreciation--approximately 7 1/2 years.

However, it is worthy of note that in large measure their design and strength factors are such as to suggest the use of new power units if or when they become available for practical use in commercial service.

The foregoing does not mean that the industry is not alert to the impending development of new type commercial aircraft employing gas turbine or jet power. On the contrary, it is closely following progress both here and abroad, and U.S. manufacturers have well-advanced plans on their drawing boards and in their laboratories.

JET It does appear to mean, however, that there may be no comprehensive
AIRCRAFT introduction of jet aircraft into commercial service in the immediate future, or that when introduced they will serve all of the purposes of air transportation.

A number of important problems remain to be solved before jet transports can be adapted to commercial use in regularly scheduled service. They include

such things as the economy of fuel consumption as related to long range flight with reasonable payload; the adaptation of, or the possible replacement of, the present communications and navigation systems to meet the requirements of speed and cruising altitude; the development of completely dependable systems for pressurizing and cooling the cabin at the efficient cruising altitude of approximately 40,000 feet; the perfection of meteorological forecasting at such altitudes for regular operations; and a variety of other related matters, not the least of which is the economy of operation in commercial service--the per mile cost versus the potential per mile income.

Important experimental operation is soon to be undertaken in Europe by British European Airways using a De Havilland Comet, a jet type commercial aircraft developed by the British. It is being closely observed by the air transport industry, and certainly the experience thus gained will prove invaluable in pointing the way toward a solution of some of the problems to which I have referred.

There is no doubt that jet powered aircraft ultimately will become fairly commonplace on the important airways of the World, including those in the Pacific, and I fully expect to be around long enough to make the trip from the Mainland to Hawaii in a matter of approximately five hours.

THE SUN Looking further into the future, and quoting Dr. John Victory, Executive
IN THE Secretary of the National Advisory Committee for Aeronautics in
EAST Washington, who says, "We will live to see it possible for a person to be eating breakfast in the restaurant at the airport of our Capitol, Washington, D. C., and while doing so watching the sun slowly rise in the East. As the sun mounts toward the zenith our friend will board a jet airplane and depart for the West. The sun, though steady in its course to the West, will appear relatively to move eastward until our friend, arriving at Honolulu will have seen the sun both rise and set in the East while he drives to his home in total darkness."

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"GIFT PACKAGING" & DEMONSTRATIONS

Edward Goepfner

THE IMPORTANCE On packaging I can only give you a personal opinion. My
OF A NICE PACKAGE opinions on packaging are based on the experience that we have had in the states. I think, first of all, "What is it worth when it gets there--not when it leaves your shop, but when it gets to its destination?" I know florists who have lost a lot of time and money by making a beautiful flower arrangement and actually sending it out in a galvanized bucket. I once heard of a florist in a big city who was doing a terrific job of packaging. When I was in that city some years ago, I asked to see his work and he showed it to me. He was using only corrugated Campbell's soup boxes. He prepared beautiful floral arrangements, put them in those boxes, and then wrapped them with paper. See how he's missed the boat? He's been advertising Campbell's bean soup instead of having his own name on that package and wrapping it nicely. So I said to him, "I don't approve of your packaging because you don't have your name on the outside."

"Oh," he said, "my customers all have maids; the customer does not see that box." He doesn't realize that there are a lot of maids who have very good taste. (Laughter) I personally feel that we can't overlook the fact that whoever opens the package, it's got to be right. If other firms and other industries, such as the perfume industry, will spend more money for a box than they will for the commodity, it certainly is worth it for the florist industry to look into packaging.

PREMIUMS FROM
PACKAGING

The other day my wife received a lei from one of your ladies here in Honolulu, who's a customer of ours in San Francisco. It was put into the cover of a box and wrapped in green paper. It was well done, but how much finer the impression would have been if that had been a very attractive lei box. I don't have anything in mind as to what kind of box it should be--a long box or a square box. I would have been much more impressed and the lady would have been more satisfied if she had paid a little bit more for that box and obtained a nice one. She is a member of one of your leading families. People, whether they're in Hawaii or anywhere else, will pay for what they're getting. Maybe they don't want to pay a premium, but they'll pay a reasonable price.

You must want to do a better job. If you thought you knew it all, you wouldn't be at the Clinic. So, look into the packaging of your leis; look into packaging from the standpoint of the best way to get the flowers there. I had pointed out to me many years back the case of a lady who paid \$10 for a plant in our store and bought another one on her way home for \$7.50. She said, "When I got the plants home, yours was worth 25 percent more by the way you presented it."

I know a lot of florists, and this applies to the wholesalers, too, who buy presentations. The flowers must be packaged and made presentable for them so they too can look into the box. I feel that more and more often florists buy a nice thing just because it is presented nicely. They will pay for that little additional effort. There are many beginners in the florist business who do not know the quality of flowers but they know a nice thing by the way it is presented.

COSTS OF
PACKAGING

In our shop we handle flowers, just as the other fellow does, in many ways, but it costs money to package well. You can't get away from the cost. On the other hand, I don't feel that the box always has to be very expensive. It doesn't necessarily call for spending lots of money but it does call for thinking. I would not worry too much about the cost of packaging. I would be very careful, however, as to how far I would go into expensive packaging until I was satisfied that the industry here can stand such costs. We know in our shops that packaging costs run anywhere from 17 cents to over a dollar per package. We use corrugated boxes for every package, and paper boxes for every package leaving the store to be delivered. Nothing is merely wrapped--whether it's a 25-cent or 75-cent order. Many times I have seen something sell for a dollar or a dollar and a half, and it might cost us that much to package it. I can't make money on a dollar and a half purchase because of the way we present it.

DEMONSTRATIONS
AND COMMENTS

Now, I was asked to talk about some flowers here. (Demonstration of cattleya.) Personally, I think that as far as this presentation is concerned, with a ribbon on here, it is excellent. It has us beaten. If you wanted to get extra fancy, you could have put a nice spray of orchids on the outside of the ribbon. (Laughter) (I didn't mean that to be funny.) Now let's take a look at the box. It's questionable whether that is good enough. If this were in our shop, we would have lined the box. We would not let the waxed paper touch that orchid. We would have first put the waxed paper in here (in the end), then cotton, and then the orchid. Now, this orchid is loose. I don't

suppose that you have the delivery boys that we have, who may throw the box three or four feet. (Laughter.) So, that orchid would be pinned in the box with either a corsage pin or other pin; and if it were pinned in, it could not shift. As it is, this orchid can bounce all around, and if it does, all the edges of the orchid turn black immediately. We might not use as much ribbon as is on this orchid. Some people like less ribbon and some like more ribbon. I personally do not like any. I can imagine a nice presentation of this orchid with some tiny ti leaves for a background. Make it simple and elegant. An orchid is beautiful in itself and needs very little added decoration with it. This is the way the people like it, but the reason is that this is the only way we have ever shown it to them. Some people may not buy the orchid because of the ribbon.

If we were going to ship this orchid any great distance, and we do ship some, we would line the box with what is known as kimpak, stapling it in. Then we would line the box with wax paper. If we used a wax paper lining, we would place a light sheet of cotton over it--not so heavy that it would press the orchid down. This orchid would be put into a glass tube, and it would be sewed in. To insulate the flower against either hot or cold, we would line the box again with kimpak and put it into a corrugated sleeve. That would protect this orchid from any kind of weather. We also put a reply card in the box so that people can tell us anything they want about the orchid or the way it arrives. And I might tell you that nine out of ten times, it gets there in very fine shape.

ANTHURIUMS (Demonstration.) Now, here again I would have used cotton in the box. The edges of the flower can be bruised so easily with this paper. I would split a sheet of cotton and put a very light piece in the box, and also in between the anthuriums. I don't know enough about packing with shredded paper because we never use it. If people are not careful in taking the anthuriums out, the shredded paper will cut the flowers. This is cellophane paper and I think waxed paper would be far softer. If this were going some distance, we again would line both the interior and exterior of the box with kimpak, and the flowers would be tied in. We would put balloons of water on them, if they were going very far. We would tie every flower separately. (I'm talking about retail delivery and not wholesale delivery.)

One point I want to bring out while I think about it--in nearly every place I have been, I didn't like the way you handled the flowers. I simply cannot see why flowers have to be thrown down. Flowers are like babies. You wouldn't take a baby and throw it down--you'd lay it down. None of us would like to be tossed down two or three inches, let alone a flower. When you're packing these flowers the effect of poor handling doesn't show until we get them. I also think that you've got to feel for the flowers, to know that you're hurting them and that you must treat them gently. Anthuriums are among the hardest flowers to ship, because in a plane there is a certain amount of vibration you cannot get away from. If the box vibrates just that much (demonstration) and one flower touches another, they are black when we get them. Many times we do not buy anthuriums from the Territory because they are black on the edges. There's no point in our buying them because we can buy good ones. We have many anthuriums in the states.

DEMONSTRATION WITH GLADIOLI This idea is good (open end box with stems sticking out and tops prevented from touching end of box). This protects the flowers when the box is heaved across the room. If these were roses, we would put a cushion of waxed paper in the box before laying the first tier of flowers. Then we would keep the roses maybe an inch or inch and a half away from the top of the box to protect them against that certain dropping of the box, or someone handling the flowers carelessly. This box is too weak when cut down so

far at the end to make room for the stems. Those are just little things that it has taken us a long time to find out.

We find that in packaging flowers it's far more important that the box of flowers is right than a bowl of flowers, because a bowl of flowers is already arranged. The woman places a bowl and may overlook some little imperfection. But, if she handles those flowers individually from a box, every one of them has to be right, otherwise you have lost just that much of the importance of perfection. These are beautiful gladioli. We do have glads that are better, but the growers pay a lot of money for the bulbs.

Most of your Hawaiian flowers are quite lovely. We are very much impressed with your vanda hybrids, and we think your foliage is very, very wonderful. I can see a great future for foliage. I'll talk about that tomorrow morning. Thank you very much.

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NEW DEVELOPMENTS IN STORAGE, PACKING
AND PACKAGING OF FLOWERS

James Sykora

EXPERTS We have just begun to learn what the flower industry, both amateur and professional, really amounts to in the Islands. The subjects assigned to me, and I suppose to the rest of the speakers, seem to be subjects that we heard about a long time ago, but they just do not fit the local circumstances at all. Frankly, I don't plead guilty to being an expert in the flower business in spite of what your advertising pronouncements say or in spite of what the introducer might say. I stand here before you now and say that I am not. The only thing I can claim is that I do think that I have had a wide practical experience in the handling and marketing of flowers. So, please do not call me an expert. I won't like it. I shall endeavor to talk to you out of my experiences which I have had the good fortune to obtain during the last 27 years of my life.

HISTORY You know, it might be well to give you just a brief history of packaging in the flower business on the Mainland. Actually the business there, big as it is today--650 million dollars annually through the retail shops of the country--was not much different 50 years ago in the middlewest than what it was in Hawaii 10 years ago. I can recall my father telling me, when I was a very small boy, of the growers bringing flowers into the markets in their hats. And that was in the city of Chicago. So you see in 1900, fifty-one years ago, the Chicago flower market was in far worse shape than your Hawaiian flower market. Carnations were not picked as they are now. We picked the flowers off and that was all; they were not shipped with the stems.

CLARIFICATION That gives me a chance to say something to you that I feel should be mentioned. Mr. Haley was being beset by questions this morning and he gave you the answers, but for your own sake I need to clarify some of the things that were said this morning. Half knowledge is worse than no knowledge, and in this case I think it is much worse because you might carry

away with you some impressions that are entirely erroneous. It is necessary for us, if we are to be helpful to you at all, to be absolutely honest whether you like to hear what we say or not. I'm kind of bullheaded that way. I would like to be able to say the things that will please you, but I will not. You asked questions about what carnations are worth. This is a long way from packaging, but I like to go the long way around and bring you back. When Ben Haley talked about the price of carnations, I thought a tidal wave hit here. I could hear everybody hit the back of his seat and a great gasp went out. Then, like the recession of the waves I could hear a titter go through the audience as it settled back and enjoyed the thought of "Just imagine; if we do this thing right, we will get 16 cents apiece for our carnations." Well, you are not going to get 16 cents for your carnations. Forget it. In the first place, many, many more carnations on the Mainland sell for two and three cents than for 16 cents--produced in greenhouses too. I want you to bear in mind that there are differences in quality. Denver is a mile high; they brag about it. Because they are a mile high, they have a fine clear atmosphere and a climate that carnations like. (It is just like Hilo which nearly burned up last week; they had only ten inches of rain and they say that everything was burning up. Even so, it is still adapted to the growing of ti leaves, monstera and pothos and the rest of them.) But anyway, they have those conditions in Denver. As Ben told you, in the national carnation shows Denver always takes the bulk of the prizes in competition with the very finest that are produced across the country. I want you to remember that we are a big country and that carnations are grown in all areas of that country, except in the south where it is too warm. They are grown under glass in all areas and they are grown by good growers who are students at their jobs. In Denver they are able to control their market. They do not raise prices on holidays, while in our Chicago market, where we sell millions of carnations, the price goes up on a holiday due to scarcity but it goes very low in periods of overproduction. We do not have the control that they have in Denver so we don't get as much money at certain periods as we get at other periods. They probably fare better on the overall average, but I want you to know this--all of the carnation growers in the Denver area do not have Cadillacs. They don't all live in 4-room houses, or do they, Ben? There are some of them who are doing very well and there are others who have trouble paying their bills, even in Ben's organization. But they are all much better off for having that organization. That's the point I want to make to you.

PACKAGING What's that got to do with packaging? Packaging is a very important factor today in the proper merchandising of your product. After you have grown the flowers, even if they are grown well, they must be brought to the markets through whatever channels you choose to market them or which you find most advantageous. For a long time there was very little change in Chicago in the packaging of flowers for the markets. (I'm going to confine myself to packaging and refrigeration of flowers for shipment and merchandising through retail shops and through the wholesale stores, without talking about gift packaging.) We have found that the handling of flowers over the many years changes but slowly; the changes should be more rapid. Your packaging problems are no different than ours, except that they are newer. We used to pack practically all of the flowers that we shipped to other markets in light lath boxes lined with newspapers and rewrapped. That was all right while express rates were low. I don't have to tell you how much it costs to transport. It is making your problem acute and it is making ours more acute every day. So we had to study other methods of packaging and started using corrugated boxes and fiber boxes. Today the bulk of our flowers move through the commercial channels in those boxes. But we have several types. The most modern of those are being used by some of your own shipping establishments.

Recently, I was impressed with the box used by Hill Floral Products, the big rose growers, at Richmond, Indiana. They use a 300-pound-test one-piece box which has a corrugated corner that actually folds. It's a very heavy, strong box and we do not think we can afford to use a box like that.

You must always bear the question of economy in the back of your mind, but with economy there must be adequate strength and support also. I would not recommend that you use a box much heavier or stronger than that adequate for the job. Also, for most of our shipping today we use wire cable around the box instead of roping. Why? Only because it's cheaper, takes less labor and costs less money. Actually, we like rope best and we know it is best. Every once in a while one of our boxes is cut through at the end by the cable. We are taking a calculated risk which we ordinarily don't like to do. It is important that you use judgment and discretion and keep economy and thrift in mind.

We found too that we had the problem of moisture which, I imagine, is particularly bad in a climate like this. Boxes would absorb moisture from the air and the flowers, and we had to use something that was impregnated with wax or paraffin in order to prevent the collapse of the box. I might say that there are still many, many shippers all over the United States, and here I presume, using boxes that are not wax impregnated or wax coated. They should be, because nothing destroys the merchandise quicker than a box that is shattered in transit. You make up a box beautifully and properly packed, and you think it's going to ship anywhere because you took so much care in fixing it up. But if you saw it at the other end, you'd be shocked and say, "We never packed a box like that. Don't tell me that's our box." That's an important thing to watch about packaging.

FUNDAMENTALS OF PACKAGING The fundamentals of packaging have always been the same. 1) Use a package that will stand up under the condition to which it is going to be subjected. 2) Know how to pack those flowers so that they won't shift. 3) Know that you must put heavy flowers on the bottom and not on top of light flowers. Even today that is sometimes overlooked. 4) Know that even though you cleat a heavy flower like the hanging heliconia, that isn't always adequate. Sometimes you forget that the heavy stem can shift and cause the heavy flower to come in contact with the end or the side of the box. Then you have the problem of rubbing. If you have your flowers partially opened and they rub one against the other, many a flower that was perfect when it was put in the box is absolutely worthless when it arrives at the destination. And you can't understand why.

Let me tell you why it hurts. It isn't so bad if the recipient of your flowers takes the time to write you a letter or wire to tell you what's wrong. But how about the fellow who says, "That's the second time I got flowers like that and darned if I'll get any more of them."

Let me tell you something about packaging. In Hilo, some of the audience asked me this question, "Mr. Sykora, didn't you at one time handle flowers from Hawaii and didn't you quit?" I said, "Yes, we did." We tried to get flowers directly and we tried to get flowers through large shippers in the area. We placed regular orders of three to five boxes weekly and we took them regularly whether we sold them or not, because we had absolute faith in our ability to build a market for some of that merchandise. We did build a market and sold those flowers for good prices, and it began to look as though we were getting somewhere with them. We handled ti leaves, we handled crotons, hanging heliconias, a few gingers. We even tried some of the plumeria which is so abundant here, but it doesn't hold up too well. And do you know what happened? After about the third shipment, the shippers got a little careless. After all,

they had us on the books for a regular shipment. They knew they were going to ship us again next week and we must be selling them because we hadn't written not to ship or to cut down. About the fourth week we began to find that we had some ti leaves with the edges burned. We found that we had some six or eight inch ti leaves in amongst the 15 inch ti leaves. We found the heliconias looking like those (pointing), excuse me, with the mildew on them. I don't like it. Neither do my customers. I know that you get mildew in this damp climate, but you can take mildew off. You don't have to ship them with the mildew on them, but these were shipped that way. The shippers decided that since I wasn't kicking, perhaps they should cut some of the stem off to save weight, so they cut the stem down to a foot. Now, of course, because they grow eight feet, I don't want you to ship them eight feet long, but on the other hand, you don't want a heavy flower like that on a one-foot stem. Anyway, they decided to cut the weight and transportation costs by chopping off some of the wood. Maybe they thought we would patch it up. I don't know. (Laughter) But we didn't. We thought we were doing our job of selling and promoting those flowers. I think I wrote one letter of complaint, and I quit after about the sixth or seventh week. Then, we bought Hawaiian flowers only when we had to have them. Generally we could pick up a few here and a few there and we stopped promoting them. You see, there is the trouble. With improper packing or improper packaging you may not hear about it--about the dissatisfied customer--and that's bad. You don't have any chance to explain then; you've just lost his business. That dissatisfied customer tells somebody else why he was dissatisfied and why you can't trust that stuff. No matter how well you grow the flowers, they're not going to be worthwhile to you, if you don't pack them and package them well. And I can't impress that on you too much. But I will say that it is very evident that many of you are right up on your toes and are really studying your jobs as to new and better methods of packing and packaging.

PACKAGING ANTHURIUMS I've noticed that there is a tremendous improvement in the packaging of anthuriums from the time when I received them. I got anthuriums from the Islands and I did well with them; I was pleased with myself. We were making some money on them. But that only lasted a couple of times. Sure, they had bags on the other end with water in them, but they were never tied down so that they wouldn't shift in transit from the vibration of the planes. Don't forget and don't believe everything the airline men tell you. They really try and they are students of their jobs. They really do talk to their help. I've seen them do it. They do one of the most progressive jobs of following through in any industry. But in spite of that, they too have some people who toss a box when they are in a hurry. They have some people who toss that last box instead of laying it where it belongs. And, as a result, that particular box is ruined. And, let me tell you what box that is. That's the box, in every case, which Eddie Goepfner or somebody else ordered. He said, "I've got to have red anthuriums for a special party. She's the best customer I have and I'm depending on you." He tells me about it two weeks before and they are the only anthuriums of that kind that come into the city that day. When they come I can't use them. (Laughter.) You can be sure of that; that's the box. And that isn't funny. I have lost a couple of good customers just that way. I'm just getting one back now. Those anthuriums were not from the Islands, but they could have been.

Your business grew up in five years and it's attempting to compete with that fifty-year-old baby on the Mainland. You had to jump from diapers into long pants quickly. You've done a pretty fair job of it, but it's got to be done better.

REFRIGERATION There are men on your Islands who know more about refrigeration than I do. There is a great deal more known about the subject today than there was just a scant 10 or 15 years ago. The day is coming, I know, in the Islands where some of your growers, the larger and better ones, are going to use more refrigeration than you are using now. There are many types of refrigeration but most of them today are the same general commercial types that are in use in the fruit and produce industries. We have gone almost completely to freon gas compressors, freon gas being non-inflammable and non-poisonous. Methyl chloride compressors are being used a great deal but most of you know more about them than I do. There are two types of refrigeration storage boxes, that is, the gravity type and the forced air type. We happen to use the forced air type, an entirely new installation with about 300 running feet of boxes, 11 feet high and 10 feet deep. That is quite a lot of refrigeration space but we put in forced air. Let me tell you something that has happened to refrigeration in the flower business. We used to think that when we got a box down to 50 degrees, we were doing all right in keeping flowers. We would go home at night and shut off the refrigerator and come back in the morning and think everything was okay even though the box would be up to 65 by that time. Along came automatic refrigeration, which we are all now using, with new electrical controls. Suddenly out of Cornell came the news that to keep flowers best we should get the temperature down to about 32 degrees. Actually, I don't use 32 degrees. We run our boxes about 40 degrees, going from 50 to 45, then to 40. I'll tell you why we are still using 40 degrees. Even with all the mechanical safety devices on refrigeration, we just don't want to gamble. We have had occasions, even with 40 degrees, when we froze the flowers in the boxes because some device failed to click. The cold settled in the bottom of the boxes and the flowers that were in buckets on the floor of our refrigerator were frozen. And so I would warn you against that. We feel that with orchids you should never get below 40 anyway. Science has not brought us anything new, except that from scientific studies we now know that cold stops the metabolism within the flower and thereby shuts off or slows down the life processes, so that the flower does not mature as rapidly.

I could talk to you about the types of refrigeration in the shipping boxes, but most of you probably know just as much about it as we do although we have been working on the problem for years. Originally we just used ice in the box chambers between the cleats. For our longer shipments we found that we could do a better job by combining a very small piece of dry ice with regular ice. I believe that dry ice is available here, but is dangerous to use. Some florists have used too much dry ice in a box for the size of the box and as a result have hurt their flowers. Dry ice is nothing but frozen carbon dioxide with a temperature of 109 degrees below zero. It's so intensely cold that if too much is used, it would chill the flowers down much too fast and in addition the high concentration of carbon dioxide gas is bad.

Strangely enough a low concentration of carbon dioxide gas, up to 15 percent, properly controlled, seems to extend the life of a flower. A young man by the name of Neff has shown conclusively that a proper carbon dioxide concentration is good for preserving the keeping quality of flowers. We are able to carry flowers very successfully for a day and a half by taking about half a pound of carbon dioxide, that is, frozen dry ice, and putting it in with about eight to ten pounds of ice in a 48 or 60 inch shipping box. It may be that you will have to use some of this refrigeration more than you are today, so I merely mention this in passing.

There are some flowers that cannot tolerate a very cold temperature, and I'm not going to say what is best for your flowers. I am sure that your University will be very glad to make special studies of all the flowers you are using in order to give you accurate information, as has been done by universities on the Mainland.

PROTECTION
AGAINST HEAT
AND COLD

In packaging there has been a great number of studies made as to different types of protection against heat and cold, and in our own experience we have found that what protects against cold is equally effective against heat. There are several types of liners that have been developed. Probably the best known today is kimpak, which is moisture absorbent and therefore helps to retard the loss of heat from a box in cold weather because of the moisture that it takes up. Other types of laminated papers have been developed but some of them are very hard to use. Several universities have made investigations; they conclude that about ten layers of newspaper are about as good as almost any other special preparations. We prefer the newspaper insulation although it is expensive; waste paper is very expensive in the United States today. But we use it, with 15 layers inside the box in cold weather. We are very particular about lining the inside of those boxes. The cold and heat get into the corners so we are very fussy about lining them. In very cold weather we wrap the box again on the outside, and in very hot weather we do it again, but in the intermediate seasons we don't make a special wrap. If it gets really hot or cold, we double wrap and wrap it again on the outside with a kraft sheet over that. Now there again we have to be economy-minded because of the cost of newspapers and the cost of transportation. You have to decide which is the most economical for you; but be sure that you're protecting against the conditions your flowers have to undergo in transit. Remember where they are going. So often shippers have a standard pack and they never change it for anybody. That's the way they do it today, tomorrow, and yesterday. You can't do that and avoid losses, unless you're going to overdo it half of the time. If you are shipping to a wholesaler in San Francisco, you don't have to be nearly as careful as if you are shipping directly to a retailer or if you ship inland on the Mainland. (We can't say makai or mauka because it just doesn't apply there.) You don't know how many times a package will be taken off a plane, whether it's in the very hot summer weather or in the very cold weather, and how long it may be sitting on a platform.

PACKING

You must also stop to think how those flowers are going to ride. We have some losses from flowers rubbing against each other, and so many losses are in orchids to good orchid growers. I venture to state that some of you good orchid growers do a wonderful growing job. You love those flowers and you love the plants; still, I'm sure that many of you, if you do ship, pack your orchids too close together. I know that happens to many of our orchid growers in spite of their years of experience. They put shredded paper or cotton or shredded tissue around the flower and on the petals, but they will not put it between the petals and the lip. It is needed in case the petal or sepal is pushed over and rubs against the lip. The shippers may send three flowers on a stem; but they won't separate those three flowers so that each one is protected and each part of that same flower is protected against the other part. So, when you think you are doing a wonderful job of packing, you probably aren't. We find others doing a perfect job with seldom a bad flower, except when they pack flowers that are bad and have already passed their prime. You may keep a flower on the plant several days because you like to look at it; but don't expect it to look just as good when it hits California. There is a prime time to pick that orchid and there is a prime time to pack it. And that is the time to do it.

PICKING If this business goes too well, you will take some terrific losses even in spite of anything I might say, just because you won't pick and pack at the right time. We had one grower who produced a lot of orchids for Easter. We called him a few weeks before and told him that it looked as though some of his orchids were being held a little too long and that he should be cutting and shipping them all into the market. "No," he said; he wasn't holding any orchids. He lost 40,000 orchids that Easter because when they were shipped they were unsalable. He admitted it afterward. Everywhere people take those chances. You don't grow enough cattleyas to do that, but the time will come when there will be a temptation to do that. I wouldn't be surprised but what some of you do that with Vanda Joaquim right now. (Laughter.) You have 170 million-odd produced--so many that you should not have to worry too much about it--but I wouldn't be surprised that some of you let them hang on a little for Christmas and Easter and Mother's Day. That's a bad habit. You probably blame us on the Mainland for your losses--there have been a lot of them. Don't learn those tricks--just take the few good habits we have and follow those. We learned the hard way; you could save yourselves some great pain and effort by taking some of those lessons from us.

PRESERVING There are many materials (in addition to refrigeration and carbon dioxide) on the market, such as Floralife and Bloomlife which actually do make flowers last much longer. The Rose Growers Association, which includes almost all the biggest rose growers in America, has written to its members to use Floralife with roses in order to maintain color and longevity of those flowers. We have found in our own experiments that putting orchids in one-quarter strength of Floralife keeps them from getting soft and flabby and enhances their life. Please forgive me for having to mention it, but I feel as though you should know about it and you should experiment with it. (Laughter.) In Hilo several people said they had never heard about it and asked why I didn't tell them about it before. So, I feel that I should mention it but I'm not trying to sell you anything.

DISEASES There was a great deal of talk this morning about the diseases of orchids. I was rather interested in the comments because what is happening with your orchids is exactly what happened with carnations some years ago. As Ben Haley knows, the carnation men were up in arms and the universities had beautiful pictures just like those shown here, but they didn't know what the diseases were. Sure, they called one carnation yellows, but they didn't know what caused the disease. They had stem rot of carnations, dry rot of carnations, but they didn't know what to do about them. It was only after they had studied the diseases for a long time that they finally found out what they could do. But there were certainly some things that they already knew. They knew that they could keep their places clean and that they could watch the young plants and keep them apart. They didn't throw up their hands and say, "There's nothing we can do." I know what your University is up against. It faces the same problems we faced in the United States with carnations. How are diseases related to packing and shipping? Diseased flowers should not be packed and shipped at all. There are certain types of diseases that are very bad to transport into other communities. Of course, you have a rigid inspection here because you're going across the ocean and into the Mainland with whatever you ship. Your disease problem did interest me because it's the same problem we had on the Mainland. I'm sure that your University men are going to cope with that problem. I'm sure also that they are going to cope with packing and refrigeration.

SENDING FLOWERS AND FOLIAGE BY MAIL

H. L. Damron

HAWAII'S FLOWERS
AND AIR PARCEL POST

Thank you Mr. Peacock. Members of the Floral Clinic. I do appreciate the honor you have bestowed upon me in asking me to meet with you today. I hope that the few words I am able to bring you will assist in some way toward the settlement of your problems, postal-wise, in this great industry. You are definitely to be congratulated in forming the Floral Clinic, and banding together to further promote this flourishing business.

I have a strong feeling of close association with the Hawaii floral industry because the first signs of Air Parcel Post came with shipments of flowers from Hawaii to the Mainland. For 15 years, my work has been in the air mail service and I have a firmly-imbedded picture in my mind of the rapid growth of this medium of communication, and its newest venture, Air Parcel Post.

Actually, there are several things I wished to discuss with you today, but they have already been covered very well by my predecessors on the platform, Col. Young, Mr. Sykora, and Mr. Goepfner. Right now I want to say, "Amen" to their remarks, and I know that much of my effort will be more or less repetition. However, it is difficult to believe that we can over-emphasize the importance of proper packing and proper handling of your commodity, flowers from Hawaii.

HISTORY OF
AIR MAIL
SERVICE

Just 16 short years ago, Pan American Airways first started carrying air mail from Hawaii to the Mainland. Cost was great and volume small. At 25¢ per half-ounce, it was the rich and impatient who used air mail service, and to send flowers by air mail was an exciting adventure. Packed in tissue paper and corsage cartons, the orchids that eventually reached their destinations were a hardy lot. But from that modest beginning has sprung big business; and today we think no more of sending an orchid, a vanda lei, a dozen anthuriums, or a whole bouquet of beautiful tropical flowers, than we do of writing to that friend or relative on the Mainland. As a matter of fact, we can send a dozen anthuriums to New York today, air mail special delivery, for a total cost for flowers and postage that is less than the postage on those anthuriums 15 years ago. In addition, we can mail our flowers any day of the week and be reasonably certain that they will be delivered one, two, or three days later, according to the distance they must travel. In 1936, the days of weekly flying boats and the then new transcontinental DC-3s, it was anybody's guess when delivery would be made.

Years ago, with postage at 25¢ per one-half ounce, it is readily understood that shipment in the lightest possible containers was necessary. With only a few boxes dispatched each trip, they received very good handling and actually the flowers had a good chance of survival. As postage rates went down, volume went up; but refinements in packing lagged far behind. So, also, did methods of handling in the air mail service. Four years ago I saw truck loads of flowers in flimsy cartons unloaded from Pan American clippers at San Francisco and Los Angeles, one box at a time. Still, in the handling between Hawaii and the Mainland, lids were torn off, flowers ruined, and it was for the most part a problem for all of us. The simple method of tying several boxes together was devised to facilitate the handling, and to protect the shipments to some degree. This procedure stood for some time, but was still considered by all as a hazardous way of handling flowers. However, no one yet had come up with a better

idea for transporting flowers over a distance, other than the age-old method of placing them in a light carton and carrying them face-up to destination as you would from the florist's shop to your home. Something had to be done! The first improvement noted, and I don't know who started it, was the tying of flowers to the bottom of the box. With that, we decided such boxes could be sacked and sack 'em we did. However, a sack of flowers looked like a sack of parcel post, and we soon found out that sacking was a bad idea.

CONTAINERS FOR FLOWERS About that time Mr. Arthur Willoughby, who was then Regional Superintendent of Air Mail Service for the Western States, made a startling discovery. He noted a fancy cake being shipped by air mail in a transparent plastic box, and his curiosity prompted him to write the sender. The sender advised him that his wife had decided to try it after several cakes in ordinary cartons had failed miserably to get through in any shape remotely resembling their original appearance. Needless to say, the cake in plastic was delivered in perfect condition because everyone handling it could SEE what they had in their hands.

Searching for a similar answer with respect to flowers from Hawaii, Mr. Willoughby then recalled the mesh sacks used for shipping onions; and between the two, a cake and an onion, he devised a very useful article in the air mail service today, a mesh bag for boxes of flowers. (Demonstration.) Even with mesh bags, however, one problem was yet to be overcome--the use of flimsy cartons. At 25¢ per one-half ounce they may have been necessary, but at 80¢ per pound today the shipping cost of a strong carton is infinitesimal in comparison--plus giving the assurance of safe transmission.

The paper companies have now come through with corrugated boxes in various sizes and of sufficient strength to withstand any abuse the boxes may be subjected to in the handling from sender to addressee. I urge you very strongly to consider the exclusive use of such boxes for all flower shipments via air parcel post. Most of you are familiar with them, no doubt, but inasmuch as some florists ship almost exclusively in lightweight cartons, I have brought samples of cartons I consider quite satisfactory. Naturally I am not here to sell boxes, but I do want to show these as samples of the type of boxes I recommend for flowers via air mail.

MAIL IN ADVANCE No package of flowers, no matter how well packed, will arrive at destination when desired unless it is mailed sufficiently in advance. The majority of our complaints today are from persons who send flowers for weddings, birthdays, anniversaries, and other occasions, and report the flowers were received one day late. It is human nature to wait until the last minute by figuring the transit time to the minimum and then expecting the Post Office to come through. However, there are many things to consider and I think that is where you can help. Try to get your customers to mail earlier. You will do them a favor, give the post office a break, and probably assist yourselves in giving better service.

I am reminded of a case recently where an irate patron wrote the Postmaster General that the postmaster of her town was incompetent because he did not get her flowers out on time and they were received the day after the wedding. Investigating the matter, we found that she had ordered the flowers mailed on Wednesday and expected them to be delivered in a small town in Texas on Friday morning. With good luck they would have just made it, but, unfortunately, sometimes we do get off schedule. This time, the plane scheduled to carry the flowers to Los Angeles went out about 300 miles, had engine trouble, and

returned forthwith to Honolulu. It was not really delayed here too long; when you stop and consider it, but by the time a new engine was installed and the plane again departed for Los Angeles the next day, it was too late to deliver those flowers in Texas on Friday. So why not ask people to mail a little early, or, be sure they understand that a delay is often unavoidable.

IMPROPER ADDRESSING Another cause of delay is improper addressing. We would like to know the answer to that, but don't really expect it. Some florists I know have signs posted to remind patrons to give proper addresses, but we all get confused with streets, house numbers, and spelling of post office names, at times. Again I am reminded of a patron who complained of delay in delivery of flowers to her friend in San Francisco. She was certain the post office in San Francisco was negligent; but actually she had addressed her parcel to 1244 Larkin instead of 1422 Larkin. The special delivery man tried to deliver it on time, but could not find the addressee. The next morning he discussed it with the carrier on that street and the carrier took the parcel out, talked with the grocer on the corner, and eventually found the addressee. If you know the answer to that, please let me know.

WEATHER PROBLEMS A big problem for you, I know, is the freezing of flowers in the winter. It would be a fine thing if we could guarantee safe transmission through all kinds of weather, but, unfortunately, we cannot do so and I don't see how we ever can. We do ask all employees to handle flowers with special care, but somewhere along the line there can easily be that one person who does not understand or is unavoidably handicapped by circumstances at the moment. From the time you deposit a box of flowers in your post office until it is delivered in, say, a town in central Indiana, from 20 to 25 different persons will handle the parcel, including postal and transportation personnel. It will ride on hand carts, trucks, possible railroad cars, and end up in a special delivery messenger's car or motorcycle sidecar. None of the vehicles are heated, except the railroad cars to some extent, and it is a constant race to get the flowers to the addressee before damage from freezing results. As stated by the other gentleman today, packing to insulate against extreme temperatures is very, very important.

WEEK-END ARRIVALS In addition, many flowers are sent purposely to arrive at destination on Sunday, which is readily understandable. However, that day is difficult for three reasons. 1) Some post offices are not open at all on Sunday, and the flowers will not reach them until Monday. 2) In smaller offices that are open, the number of employees working on Sunday is at the bare minimum, often including less experienced personnel. 3) Delivery to addressees is often difficult because of absences from home on Sunday to attend church, weekend trips, and so forth, and the parcel must either be left at the door or returned to the post office. If at all possible, it would be advantageous for all to hold flower shipments destined for Sunday delivery to a minimum. In most cases, Saturday delivery would likely be much more satisfactory to all concerned.

MAKING OF PACKAGES Before I close, I would like to show you how air parcel post packages must be stamped in the post office to identify them as such and to eliminate the possibility of the parcels being sent by surface means instead of air. We have two ways of marking; one is by use of a distinctive red, white, and blue sticker, and the other is by stamping "VIA AIR MAIL - SPECIAL DELIVERY" on all sides of the box. You can assist in the expeditious handling at the window, thus saving yourselves valuable time as well as the time of those in line behind you, if you will obtain a rubber stamp with those words inscribed and make the impression in red ink on all sides of the box before you present your parcel at the post office window. Help us to help you!!

VIA AIR CARGO

E. L. Dare

REPRESENTING ALL AIRLINES I consider it an honor to represent all of the airlines serving Hawaii. United is only one. I hope you and our competitors will forgive me if I refer to United occasionally, because I am not too well acquainted with some of the operations of the other carriers; but my talk is general in nature, and I should be able to please every one of my competitors represented here today.

MUTUAL PROBLEM The floral and the air transportation industries have a mutual problem. Our object is to try to help you and in turn have you help us in solving it. What is this problem? When I first started preparing my talk, it seemed to be just a matter of shipping flowers from Hawaii to the Mainland. I didn't think there was much to it. After some research, I found out that you had a basic problem almost identical to ours. Dr. Shoemaker covered it very definitely in his recent reports^{1/} when he pointed out that your basic economic problem in the Territory is one of expanding exports. Why? You are an agricultural section primarily, and must import some of the essentials and most of the luxuries of life. To earn dollars to buy these things, you have to export your specialties to the Mainland.

Our responsibility is to help you to increase your exports and buying power. We are happy to have the opportunity to cooperate with the Territory in licking these basic problems.

According to my understanding, we are not at the Utopia in the flower business in Hawaii. Is it expandable? Definitely. We are just starting and we want to keep on expanding. Is the basic floral problem parallel to the problems of the Territory? Definitely. You need to earn dollars so that you can expand your particular interest in the flower business. Floral exports, I understand, are the Territory's fourth highest. It is unlikely that they will surpass your sugar and pineapple exports, but they can become much greater than they are today. You are contributing to the Territory's basic objective by increasing your exports. Expansion--new markets--you want to prosper--they are all related to better living.

The air carriers are interested in solving your problem too, for our own reasons. We have an imbalance of movement in traffic, as you do in dollars. We carry more traffic from the heavy manufacturing centers of the East Coast to the West Coast and on over to Hawaii, where you consume it, than we do from the West to the East. The flower business, however, is helping us, so that at the present time we are getting bigger Eastbound loads. That is very important from our standpoint, because it helps us to spread the cost of our operations over a better utilized airplane in both directions. It is cheaper for us, and we can give you cheaper rates, than if we have a full load in one direction and have to fly back empty in the other. So you see, solving your problems helps to solve ours--it's mutual.

^{1/} James H. Shoemaker. Earning, Spending, Saving in Hawaii and Opportunities for Hawaii to Produce More and Live Better. Bank of Hawaii Publication.

PRESENT SITUATION What is the situation now? We can't do a thing about the past--it is over with. It does no good to say, "We should have done this ten years ago," or "We should have done this yesterday." We are interested in the present situation in the flower business. Again I refer to Dr. Shoemaker, who said in one of his reports, "Flowers and foliage for export is one of Hawaii's infant industries and is now going through the 'childhood diseases' of a new and growing industry. Cooperation among producers and distributors is needed to deal with the problems we face. There are, however, real opportunities for expansion. Our advantage, particularly during the winter months, is such that the industry will expand if sound policies based on cooperation can be achieved. Technical advances of air freight further favor expansion." I think that is a fundamental and a profound statement by a learned man who has spent a lot of time studying your problems out here. You will note that he speaks of the need for cooperation. That is so important in a democracy; we must practice cooperation. We have to give a little and we have to take a little. We have to give in to you sometimes when you have a problem and in turn we expect you to help us once in a while.

Let's look at the situation right now. Aren't we--the floral industry and the airlines--in an excellent position to cooperate, to help cure some of these childhood diseases that Dr. Shoemaker talked about? I think we are. I think this Clinic is a splendid example. You people are here trying to learn a better way to do your job.

There must be better cooperation between the producer and the distributor, as Dr. Shoemaker mentioned. We can't help you on that very much, but we do not want to disrupt the cooperation that has already been built up between the person who sells the products and those who grow and ship them. Every one of us has to cooperate and work more closely together. This Clinic is like a consultation period that a doctor goes through to determine what the cause of an illness may be. The floral industry has its aches and pains; but we are going to come up with some cures here, I'm sure. However, the cure will take patience, required with illnesses of any kind.

VITAL LINK Note, also, that Dr. Shoemaker makes reference to the technical advances of air freight which further favor expansion of the industry. That is pretty obvious. Air transportation is a vital link in the whole marketing chain. Your products have little value to you until you get them to the consumer. I don't mean merely getting them there; I mean getting them there in first-class condition so that the consumer will want to buy them. James Sykora in Chicago is not interested in buying "garbage," (spoiled flowers) as we call it in the airlines. Eddie Goepner in San Francisco is not interested in anything but the top quality. We are a part of that chain because if we fall down, the chain breaks. The chain is only so strong as its weakest link and we do not want to be that link. We are working hard to be the strongest link in your chain of success.

WAR BABIES Air freight and Hawaii's floral export industry are war babies. It's rather interesting to note that relationship. As I understand it, you were not exporting many flowers prior to the war. Exports developed largely because servicemen appreciated the beauty in the Islands and brought a little of it back to the folks at home. Air freight likewise is a war baby. We are both still in our infancy. Air freight was born to the United Air Lines in February of 1946; we are still young and we have a long ways to go. So have you. There's no reason why we can't cure the mumps and the measles of our

industries and come up with big healthy adults at some future date. Cures can be worked out; and I see no reason why we can't work them out together, because we have similar problems.

It's going to require several things, however; among them is careful direction. The leaders of your industry and the leaders of our industry are the parents of these new babies. They've got to direct those children in such ways that they will grow up to be good adults.

There must be understanding between the two groups. We must understand your problems and you must understand ours. When we can't make our rates as low as you would like them, you have to understand the economic and regulatory barriers we are faced with. Likewise, if we think that you are not packaging properly, we want to understand why. Perhaps we can help you with your packaging.

It may mean a compromise, but we have to compromise as we go along. We will never get exactly what we want, and you will never get exactly what you want; but by compromise we will reach a level where we will both be better off than if we didn't get together. We must respect each other's viewpoints; and when you boil it down, it means cooperation, doesn't it? That's where your success lies and that's where ours lies.

AIR FREIGHT AND THE FLORAL INDUSTRY Air freight is dependent on a healthy floral industry. In 1950, flower shipments on United Air Lines was the second largest revenue producer for our air freight service. Over \$631,000 out of \$5,500,000 revenue was from flowers on United Air Lines. There were flowers shipped as gifts, also; those we can't count easily because they move by air parcel post or air express. I was referring only to the bulk air freight movements that come under the specific commodity tariffs.

PARTNERSHIPS The floral industry in Hawaii, and that is you, is also dependent upon the airlines because of the perishability of your products, and the distances you must cover to bring the markets of the world within your reach. You see, we are dependent upon one another again, so we might as well become partners. Let's form a cooperative partnership, and include in the partnership the flower growers, the airlines, the flower sellers and any one else who has anything to do with marketing flowers. The function of the marketing fellows is to sell your products. It's your function to raise them and it's our function to get them to the market. Those are the three basic links in our chain. If we're going to have a successful partnership, however, we have to understand our mutual responsibilities. What are the responsibilities of the partners? Let's start with the air carrier.

AIRLINE'S RESPONSIBILITIES In the first place, we must render a dependable service. That's what you are buying from the airline. You have the right to expect every plane to fly that is scheduled to fly. I'm happy to say that on the Hawaii run our performance in this respect is almost 100% perfect. There are occasions on the Mainland, however, when we have to cancel flights because of the weather, but we are improving. You should expect us to operate on time, and that is our constant goal.

We have additional navigational aids that were never heard of before the war--instrument landing systems, ground control approach systems, and so forth. All of these aid the pilots to land at airports under circumstances that would

have made landings impossible before. We don't care what the weather is between here and San Francisco, just so long as it is satisfactory when we get there or at some alternate field. On the Mainland during the winter months, we have the problem of keeping the ice off the wings of the airplane. It's done beautifully now with heat, which was never done before. It has helped us to improve our dependability. We fly over or around the weather with the new type airplanes. In the old days we had to fly through storms or not fly at all. With the DC6 or the Boeing Stratocruiser the passengers are comfortable at 20 or 25,000 feet, and we can go over the bad weather or can detour around it. We have many different routes between Los Angeles and Chicago, for instance. On one day our airplanes will take off from Los Angeles and fly down over El Paso, Texas, and up to Chicago. The next day, they might fly over North Dakota and into Chicago and the next day they will fly the direct route into Chicago. But by flying with the weather instead of against it, the planes can make just as good time going the long way as if they flew the direct route, and at much greater comfort for the passenger and your flower shipments.

The third thing the airlines should do for you to be dependable is to provide you with adequate space. That is not a problem, except during the peak seasons. We can meet normal requirements very easily. During the peak seasons, however, we run into some very difficult problems on space. It isn't only your shipments that build up; many other persons and firms also increase their shipments during the holiday season, which makes a terrific peak for us. We carry your goods to the Mainland and every flower grower in California has added shipments waiting because he is trying to reach the same markets on the same days that you are. We just can't get enough space to take care of everyone during these peaks. I would certainly like to emphasize what Mr. Damron has just said to you about mail. Ship early by air freight too, if you possibly can during these holidays. You'll get better service. It may arrive a day earlier, but your customer will be satisfied instead of having it arrive after the occasion. So ship earlier; allow a little extra time. We also carry mail, passengers, and express. They all take priority over air freight, and they increase during the holiday seasons too. (You may not know what air express is here. I believe Northwest Airlines is the only express carrier serving the Islands.) We would like to be able to take care of everyone at all times, but we can't build up a fleet of airplanes just for these peaks. We can't buy a million-and-a-half-dollar airplane, like the Boeing Stratocruiser, have it sit in the "barn" for 11 months and three weeks out of the year, and fly it for just one week. It costs us money just to own an airplane let alone to operate it. We pay depreciation on those airplanes over a period of seven years. We give mail, passenger, and express business preference so that we can use the airplanes more fully, but we also give your type of traffic preference over the hard type traffic. There are times, however, when we have built up a backlog of hard freight; then we will ask you to hold down your shipments for a particular day so that we can take care of the fellows who gave up space for you yesterday. Situations arise where we have to be reasonable and divide the space that is available.

The next thing that you should expect from the airline is reasonable care and protection. We realize that flowers are living things. We try to emphasize that to our personnel constantly. I'll admit that we slip at times, but we try to keep our slips to a minimum. We try to impress upon our people that flowers require water and oxygen, that they are delicate, that they should be protected from extreme heat and cold, and that they should receive extra special handling when necessary. Frankly, we haven't found a quick answer to doing it better than constant training and supervision. If anyone has a quick answer, we

certainly will welcome it. In the meantime, we will supervise our people and train them to handle flowers more carefully and efficiently.

The next thing that you can expect from an airline is an efficient and dependable ground service. We realize that we owe it to you as shippers. You can lose all the advantages of a 300-miles-an-hour air service if the flowers sit at the airport for an hour or two. If we can get a good ground transportation agent, he can prevent many losses and claims.

On the Mainland, for your information, we contract through an industry-owned organization called "Air Cargo, Incorporated." It contracts for our local pickup and delivery services that are performed at the various cities throughout the states. Here, you know, the Hawaiian Freight Forwarders are the pickup and delivery agents and do that work for most of the airlines. They do a very fine job and we are very happy to be affiliated with them. When they don't, then we will look for someone else to do a better job.

We can't always do the special delivery job that each shipper wants because of the cost factors included in pickup and delivery. We can't afford to take every package that you send into Chicago, Des Moines, or any other point and make a special delivery on it. We just can't do that; it costs too much money. We make one or two deliveries a day on air freight service, unless you ask for a special handling service which may cost you \$20. We do not make a nickel on pickup and delivery service, but we owe it to you to give you a door-to-door service if you choose.

Another obligation we have assumed is to notify the consignees promptly upon arrival of a shipment. If no delivery is requested, we should inform the consignee by phone that his shipment is there and at the same time keep it in the refrigerator for him. We should notify him of delays or be able to notify you where your shipments are through a tracing procedure. We fall down occasionally, but give us enough time to get your shipments to your destination before you expect us to start tracing it. Don't expect the impossible.

We also owe you a prompt, fair and honest claim service. I think we have just that; but for all the effort we expend to prevent claims, we still have them. Basically, the claim policy of United Air Lines is to pay claims promptly. As a matter of fact, 90 per. cent of our claims are settled in 90 days and a majority of them in thirty days. We have to be shown that we were responsible before we put out our hard-earned money to pay any claims, but if we are responsible, we are willing to pay them promptly. We try to make a fair and honest decision based on facts and not emotions. Our claim policy is considered from a long-term viewpoint. We have been in business a long time and must have an honest and fair basic policy for our decisions.

In 1950, for example, we carried 37,000 flower shipments by air and out of this we had 313 flower claims last year. That is less than 1 percent, which is not a bad record. Out of the \$631,000 worth of flower revenue, we paid out \$6,100 in claims. Our average payment was about \$20 for each one paid. In our Hawaiian operation we carried some 743 shipments. If we had the same ratio of claims between Honolulu and the Mainland as we did in our system as a whole we would have ended up with 7 or 8 claims on the 743 shipments handled. So you see it isn't a large percentage. But, as Jim Sykora says, it is always the one that you wanted for that special occasion that didn't make it. Our Claims Department tries to operate so that it will go out of business.

We sent Mr. Lou Miller to Hawaii to study the vanda orchid picture. Many of you people met him while he was here in January. Mr. Miller made a complete study of the vanda from the claims standpoint, and the benefits are being derived by you and United Air Lines at the present time. You may be interested in some of the causes he found: concealed damage; ordinary damage; delays; losses; mortalities--the usual damages we have in our shipments of flowers by air.

The last thing I think that you can look to us for are reasonable rates. What is a reasonable rate? I think we will all agree that unless a fellow makes a profit the rate isn't reasonable. I think we can also agree that if he makes too much profit it isn't reasonable. Our effort is to try to establish a rate that will provide a reasonable profit to us, allowing us to improve our service, to expand, to do a better job for you, to assure jobs to our 12,000 employees, and to provide a small dividend at the end of the year for our 25,000 owners. That's all we want. We made \$6,000,000 on \$104,000,000 gross revenue last year, or about 6 percent. We don't think that is excessive at all in today's economy. We have competition, too, although rates are the same for all carriers. The Civil Aeronautics Board says that we can't collude with one another to establish a rate. If one takes the lead in a rate change the others may or may not follow, but in the end there will be no rate differential among the airlines.

Are your air freight rates reasonable? Our Hawaiian flower rates are actually losing us money. We are not making any profit either on air passenger or mail service, on our Honolulu run. Our passenger rates average 70 cents a ton mile from Honolulu to the Mainland. Our mail rate from here to the Mainland is 75 cents a ton mile. Our air freight averaged 38 cents a ton mile in 1950 on the Honolulu run. Our general commodity rate is 59 cents a ton mile average. Vanda shipments come under our specific commodity rates and returned us approximately 25 cents a ton mile, about a third of what we get for carrying passengers. If you think the balance isn't proper among these rates we will welcome any suggestions that you may have. We won't guarantee to lower the rates at the moment as the trend is very definitely on the contrary. But I will work hard to keep the rates at the present level, because I see your problem much more clearly since my visit with you here in the Islands.

SHIPPER'S

RESPONSIBILITIES

What do we expect from you? First of all we expect you to ship a good product. We expect you to package it properly. We expect you to notify us in advance when you anticipate abnormally heavy loads. We like to plan in advance, too.

In our claims investigations we have found evidence that you do not always ship good products. Poor products are a reflection on the entire industry. You create a lack of confidence among the receivers and you jeopardize your position and that of your neighbor in the eyes of the carriers, wholesalers, retailers and the public. Our reaction is to get tougher on our tariff and claims policies.

To ship a good product you must first of all grow a good product, take care in harvesting it and be extra critical in inspecting and sorting and grading it for shipment.

As Mr. Goepfner told you earlier, the value you must be concerned about is not the value of the product in your packing shed but the value in the hands of

the retail florist. That means proper packing and packaging. You are saving money if you use standard, well-tested containers with approved protective devices inside and outside the container. Precooling has been found to be advantageous; and be sure you have insulated the box adequately to withstand the mainland weather extremes.

We also ask you to recognize the limitations of air freight service. We may be able to fly you 300 miles per hour through the air, but we still cannot get you to the East coast overnight. The over-all time is considerably slower than the air time because of the many stops along the way and the inherent slowness of ground transportation. Loading and unloading takes time and we have reams of paper work to perform before we can release a shipment. The government, shippers, airlines, and consignees must obtain copies of all the documents. Then your shipment may wait for a half day until the next scheduled delivery. Don't forget too that there is a time difference between Honolulu and the Mainland--it's later there than you think. New York City, for example, is 5 hours ahead of you. About the time you go out for your morning coffee, New Yorkers are through for the day. Plan your contacts and shipments accordingly.

MUTUAL

RESPONSIBILITIES

You can see from the above remarks that we have a vital stake in your problems and you must understand ours. We don't have those transport airplanes yet that Colonel Young told you about in which we can beat the sun, and we won't have them in the foreseeable future. So let's get back down to earth and help each other. Just the exchange of ideas and a free discussion will solve many trifling annoyances before they become problems. Perhaps somethings will arise on which we can take joint action, such as developing greater markets. That will help us both. Above all let's cooperate. Cooperation is the key to success. The airlines are willing to do their part.

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SHIPPING SESSION PANEL

Moderator: Takumi Kono, Agricultural Education, D.P.I., Hilo.

Members: John Rodenberry, Hawaiian Freight Forwarders; Dr. Calvin Ritchie, Bureau of Entomology and Plant Quarantine, U. S. D. A.; Walt Woods, Hawaiian Airlines; Curt Haxthausen, Pan American World Airways; Fred Zinn, Matson Navigation Company; James Sykora; Edward Goeppner; E. L. Dare.

Kono: I hope that you are all well fortified with questions. This topic of shipping is a "hot" one. For that reason, I ask that we follow the good old democratic procedure--one thing at a time, one man at a time. Direct your questions at any of the panel members and the panel members are free to ask questions too or add to a reply.

Q: Mr. Damron, why are packages of flowers returned to retail florists' shops for insufficient postage? I understand that in many cases florists have paid the postage requested at the post office and then the package was returned. Is there anything we can do--such as paying for it afterwards?

Damron: Yes, it can be done. I'll take that up.

Q: Mr. Damron, the mesh bag seems to be a wonderful idea but it is too small. Why doesn't it have a square bottom so the post office people could put the boxes right in as they get them at the window, thus avoiding double handling and getting the flowers into the bag upside down? Could that be done?

Damron: Sounds good, but I imagine the cost of manufacturing a square bag would be high. The bags we use are relatively inexpensive.

Comment by Questioner: Flowers are light and the bag could be much bigger. I notice that whenever a box is big it doesn't get thrown, it gets lifted.

Damron: Very good, I'll pass the information along.

Q: Mr. Dare, do the airlines plan for the anti-icing of planes?

Dare: I'm afraid I have confused you; the anti-icing I referred to in my talk is used on the exterior of the plane preventing it from getting loaded down with ice when flying through bad weather. It's a safety device. I'll answer the question I believe you are interested in, however. The Boeing Stratocruiser used in the Pacific flights by United Airlines, Pan American World Airways and Northwest Airlines is a completely air-conditioned airplane which is pressurized in the cabin and cargo pit. On the Mainland we have DC-6's in which the belly pits are not heated, but we do carry blankets to prevent the packages from riding against the cold side of the airplane. If you do ship to the Mainland, please remember that it gets cold there during the winter months.

Q: Mr. Sykora, what happens to a cattleya if it is put into 40 degrees and then brought out into a room temperature of 70 or 75 degrees?

Sykora: I tried to make the point in my talk that with cattleyas you have to be very careful. With anything below 40 degrees we run into trouble with orchids. We carry our cattleyas at 50 degrees in refrigerators separate from other flowers--this is perfectly safe. There are wholesalers, however, who do not have separate iceboxes and carry cattleyas at 40 degrees--the temperature for the general flowers. It has been shown at Cornell that some flowers can be kept at 30 degrees provided you can trust your refrigeration equipment.

Goeppner's Comments: In the retail trade we keep our refrigerator at 48 degrees, but we put the orchid into a tube of water and then in a large covered box when it is in refrigeration. We find that the flowers keep several days longer that way.

Q: We are two or three thousand miles from our markets. We use ice and dry ice in our packages but by the time the packages reach the Pacific Coast the ice has disappeared, and the weight of the ice also. What allowance does the post office or airlines make for this loss in weight? (Laughter)

Dare: You aren't going to catch me on that one. (Pause) An airplane to us is only worth what it can carry off the ground or what it can land with--it has limitations weightwise. All we have to sell is weight. The ice you put in doesn't do us any good. It is one of the items that must be figured into your costs. By taking your ice, we are losing other revenue traffic that may be left behind. Curt Haxthausen, do you have anything to say about that?

Haxthausen: Yes, Dick, the moderator said we could ask the questioner questions. Where has the weight gone and who carried it over there? (Laughter).

Comment by Questioner: I'd like to carry this a little bit further. I don't mind paying the weight from here to San Francisco, but when I cut a through airway bill to an inland point, I hate to pay for the weight I originally started out with. I grant you that if I start out here with 8 pounds I should pay for the weight from here to San Francisco, but I do not want to pay it from San Francisco to Chicago on a through airway bill.

Dare: Have them take it off at San Francisco and reweight it--it might be worth your while.

Q: In our shipping experience we find that our losses or claims are directly in proportion to the number of times the package is transshipped--the number of times it is handled. By sending recording thermometers along with some shipments we found that there is a lapse of overnight and a half a day before they are delivered from the airport to the consignee at the city of destination. Is there something being worked out by the airlines and express people to

take care of the packages while they are on the ground, especially where they are exposed to extreme weather such as that in El Paso and Chicago, or is there something that we as an industry can work out? I direct this question to the group.

Rodenberry: There is no adequate refrigeration at the local airports; Hawaiian Airlines has perhaps the best setup. We seldom need refrigeration--generally the shipment comes from Hilo and goes right out. One Hilo shipper suggested that the Territory should install refrigerators at the airport. I don't go along with this because I think the industry can take care of it. I'm sure that Hawaiian Air Freight would contribute toward a refrigerator at the airport if the airlines would. We could possibly build one central refrigeration plant at the airport. I can't make a definite commitment for our company but I know we would go along with it.

Woods: I'd like to say that Hawaiian Airlines has a reefer icebox service at each one of its terminals on the Islands. It may not mean an awful lot to the overseas people but it does to the local florists. I would like to have you tell me what to do with anthuriums, however. Some say put them into the icebox--if I do, I have a claim--if I don't, I have a claim. I really don't know what to do about it.

Rodenberry: Mr. Woods, do you feel that your refrigeration is ample?

Woods: No, it certainly is not. We are going to construct a big drive-in reefer at the airport.

Rodenberry: Mr. Haxthausen, do you think Pan American's refrigeration is ample?

Haxthausen: No, I don't.

Rodenberry: Mr. Dare, is United's refrigeration ample?

Dare: I don't know if we have any, frankly; I cannot answer that. You are our freight agent, Rodenberry, how about it? (Laughter)

Rodenberry: You don't have a good reefer here.

Dare: In San Francisco, Chicago and Los Angeles, we do have a walk-in reefer box, which is adequate to take care of our needs except at the peak season.

Rodenberry: Mr. Haxthausen, do you care to make a statement as far as financing a reefer is concerned.

Haxthausen: I think the question was, what could be done at El Paso and Chicago? (Laughter)

Sykora: I think the facts should be recognized by everyone, that you can't depend upon refrigeration because there are so many transfer points. Even in places where there are reefer boxes we have the problem of making sure that the flower boxes are brought under refrigeration quickly. They are loaded on trucks ostensibly to

move right out and suddenly the fellow handling it is not on the job for one reason or another. Sometimes the plane doesn't leave immediately. The main point, however, is that at all of these transfer points there is no refrigeration. You might as well recognize the fact that flowers are subjected to extreme heat or cold and you must be prepared to pack against it--you can't depend on the airlines for that protection, at least not today.

Q: Mr. Sykora, your firm operates in a region where you have the extremes in weather. How do you protect your flower shipments against these extremes?

Sykora: We have very cold weather. In such weather we use a double-wrap, which adds to the costs, but we have never had a customer complaint. By a double-wrap, I mean we take a piece of kraft paper and put in 16 layers of newspapers and wrap the box and then make another wrap just like that with 16 more sheets of newspapers. I've heard and read what has been done at various universities on this. Their studies show that after you get above 15 sheets of newspapers you get no more beneficial effect from added sheets. I know that is not true. My employees hate that double-wrap. When the day rolls around and I say, "start double-wrapping," there are no smiles in the house. (Laughter) I also know that we have almost no complaints; we used to have a lot of them. That does add weight, and you can't get away from the fact that it costs money.

Q: I would like to point out that the aircrafts are pressurized and that the temperature for the passengers is 70 degrees and for the freight it is 70 degrees. With a minor adjustment could not the temperatures in the cargo holds be made to correspond to the regular ice box temperatures?

Dare: Are you looking at me? (Laughter) I am sure that our system is adjustable within compartments; I am almost positive that it is, and I see no reason why it couldn't be made cooler down below.

Haxthausen: On the Boeings we do have some leakage of air from the belly compartments to the passenger compartments. It is almost impossible to maintain any temperature down there less than 5 to 10 degrees below that in the passenger cabin. Of course, passengers' comfort determines the temperature in the plane. If we reduced the temperature to 40 to 50 degrees for the orchids, we would have a lot of vociferous passengers upstairs. Generally, the temperature in the passenger compartment is around 65 to 70 degrees, and only about 5 degrees less in the freight section below. Maybe the next airplane will have compartments that we can keep at different temperatures.

Q: Mr. Sykora, would wrapping a corsage, say an orchid, in an airtight cellophane bag increase or decrease the life of that orchid?

Sykora: I've heard comments both ways. From our own experience we have no indication of which is better. I have heard from people who do

a lot of shipping that they prefer to have an access of air into the package, if there are orchids in it. Orchids should not be tightly sealed.

Q: Mr. Dare in his talk stated that there was little possibility of getting a reduction of rates. I direct this question at Mr. Dare and Mr. Haxthausen. If we cannot get a reduction of rates, can we obtain a reclassification of products within the different rate classes? I speak principally of nursery stock and plants. The rate on those items now is the same as for vandas or other cut flowers. I know that there are a lot of shippers interested in obtaining the same rate for these items as prevails for foliage.

Dare: What are you asking for, a rate reduction?

Q: No, a change of classification.

Dare: A change of classification, but what is it? Isn't it a rate reduction on those particular items? In other words we get less money for carrying it once it is reclassified. No, I won't help you out any.

Comments of Questioner: What I had specific reference to is that shipments from New York to Seattle for 100 pounds of nursery stock could be sent for \$19 and some cents. That was the rate about a year ago. An equal shipment from Honolulu to Seattle, about the same distance, would cost our nursery stock and plant shippers \$30. In other words there is a rate discrimination there, which should be equalized.

Dare: In our organization if you mention the word discrimination very loudly, our lawyers will change it immediately. If you can justify a case of discrimination anywhere, let us have it. I don't say we won't reduce rates or that we won't change rates. We don't think that we have a perfect balance in our rate structure. When we say no, we feel that we must, and if we say yes, or ask for additional facts--let us have them. We want to base it on facts--were're reasonable. But don't expect rates to be the solution to your marketing problem. That is not the airline's responsibility. Many people expect us to give them a rate reduction so they can sell in a distant market--we can't do that if it means subsidizing them at our expense.

Q: I'd like to ask Mr. Sykora or anyone from Hilo, how long do you think it is safe to leave flowers out before putting them under refrigeration? Is there anything to be gained by putting flowers under refrigeration for a couple of hours?

Sykora: I don't think there is any question that precooling for a couple of hours would make a great difference. If they were precooled before they left Hilo I'm sure they could stand about for hours in fine condition, which would be a real aid to their keeping quality--provided they were precooled for several hours, however. Any cooling of the container and its contents would be helpful.

Q: Do you say that without limitation, Mr. Sykora? By that I mean, could you subject the package to cooling any number of times enroute to improve quality?

Sykora: I couldn't say--we have never tested it that way. From our own experience we would unhesitatingly recommend cooling of the flowers whenever the opportunity arose. We used to be able to get rail express, before they cut down on their service, to put the flowers in coolers at transfer points, if they were on the ground for more than a couple of hours. I have never found cases where flowers were hurt by it.

Q: Mr. Dare, you stated a while ago not to expect rate reductions. You haven't told us what are the factors that would bring about a rate reduction--increased volume, special commodity rates--can you give us any suggestions along that line?

Dare: We are interested in that too. I don't know that I could give them to you one, two, three--I'm not a tariff man--but I do know that cost is certainly a factor in any business. Costs are governed by a combination of what it costs you to produce the airplane flying in the air plus the volume you can carry on it. If you are getting 100 percent volume on the airplane, you can do it cheaper than if the airplane is half full. There are other factors. For instance, I can see after my visit out here that you folks are in a different situation than is the manufacturer on the East Coast of the United States. He has been in business a long time and knows what his costs are. I think maybe we can contribute a little bit toward trying to help you fellows build up your business. That's exactly what we have done. I think you agree that we have tried to be reasonable about it, and have tried to help you build up markets in the East. It is also to our advantage to do so. There is a limit beyond which we cannot go. I cannot give you the last word, however. Whenever a situation comes up calling for a rate change it has to go through the two vice-presidents before it is finally approved.

Kono: It is 5:00 p.m. If there are no further questions, then we will close. I believe you people have expressed your thoughts and I hope that the airlines and federal agencies will take our problems into consideration.

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SPECIAL FEATURE

Mrs. Agnes Makaiwi, president of the Lei Sellers' Association, and Mrs. Rachel Pakele, member of that group, demonstrated lei making techniques as a brief special feature during the shipping session. Using plumerias, carnations, and other popular blossoms, they showed ancient and modern methods of stringing many types of leis.

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MARKETING SESSION
(Part One)

MARKETING FLORAL PRODUCTS--HERE AND THERE

Edward L. Rada

COOPERATION Yesterday you heard the mainland speakers extoll the value of cooperation. I can tell you from experience that the floral industry has demonstrated its ability and interest in cooperation already. This Floral Clinic is living proof of what the industry can do through mutual effort. While working on the multitude of details and problems, each an apparent stumbling block to progress, I encountered an appropriate quotation from one of General Eisenhower's recent talks.

Addressing the English Speaking Union in England on July 4 of this year, and discussing the progress of the North Atlantic Treaty Organization, General Eisenhower said, "Caution that is inescapable in a new and unique enterprise has been replaced by confidence born out of obstacles overcome. But if we march together, endure together, share together, we shall succeed--we shall gloriously succeed together."

His problems are parallel to ours except that they are of a much greater magnitude and so much more important to the freedom of us all. His confidence in overcoming almost insurmountable obstacles can give us encouragement in working out our comparatively minor problems so that we too can gloriously succeed together.

INTRODUCTION My topic this morning is "Marketing Floral Products--Here and There"

In one sense by "here" I mean Hawaii and by "there" I refer to the Mainland. Since my talk also introduces today's whole subject of marketing, I hurriedly skip from here to there and everywhere trying to cover such a broad subject. My remarks are based on my observations of flower marketing here and there and on the 1939 and 1948 Retail Census of Business. These data were gathered during my recent study of the mainland floral markets. The study was supported by funds of the University, the Industrial Research Advisory Council of Hawaii, and the Federal Government.

INFANT INDUSTRY There is no recent study on the marketing of floral products in Hawaii. In fact, commercially speaking, it is an infant industry, although the widespread, everyday use of flowers is a deeply rooted tradition in these Islands. In 1939 the number of retail florists was so small here that the Census reports for that year make no mention of them or the value of their sales. By 1948, however, there were 100 retail florists' shops in the Islands, not to mention the large number of lei sellers and others selling flowers at retail from their gardens, sidewalk stands, or door-to-door, and the 25 or more firms specializing in shipping floral products to the Mainland.

SIZE OF BUSINESS Just a word about the size of the two types of commercial floral businesses we have here in Hawaii--domestic sales and export sales. Domestic sales through retail florists in 1948 were about 2 million dollars, or about \$800,000 at wholesale. (This does not include sales from plant nurseries.) Perhaps another \$750,000 should be added for flower sales by lei sellers and others. The wholesale value of export sales was \$640,000, which included shipments to mainland wholesalers and retailers, and what are commonly called gift shipments of small packages to friends or to mainland customers. The 1948 wholesale value of all flower sales through retail florists and shippers was, therefore, about 2 million dollars. Since then, export sales alone have almost achieved this level and are substantially above domestic sales in value. By 1950

the local wholesale value of all floral sales, domestic and export, but excluding sales from plant nurseries, had increased to more than 3 million dollars.

NO WHOLESALE
MARKET

I speak of wholesale value--actually we have no such measure in Hawaii since we have no floral wholesale market where growers can bring their products for sale. To my knowledge, every metropolitan area in the United States the size of Honolulu and even smaller has a floral wholesale market. The marketing pattern here is in the process of change, however. Instead of retailing all they produce, as in the early days, growers now deliver most of their cut flowers and foliage to retail florists. In cases of extreme need, florists go to the growers. The wholesaling function, therefore, is being performed largely by growers and some by retail florists and shippers. The lei flower growers' co-op has recently broken the ice by setting up a downtown receiving and selling office from which it wholesales its members' carnations. Others are talking about the growing need for a central wholesale market for the entire floral industry.

VALUE OF
WHOLESALE
MARKET

Flower production is spreading to areas beyond the city limits of Honolulu and is increasing on the outer islands. As this shift continues, the need for a central wholesale market increases. Many growers would appreciate such a market in order to save time and delivery costs and to be able to sell their merchandise in an easily accessible and ready outlet. This shift in production and marketing is hardly noticeable, but it is taking place. It is evidenced by the strong moans and groans coming from the market place as outside competition is intensified.

Production on the various islands, so far, has more or less conformed to the type of market available. Oahu growers have concentrated principally on gladioli, carnations, orchids, and similar products for the local market. Hawaii growers, on the other hand, have developed their recent production to meet the demands of the growing mainland market--vandas, anthuriums and foliage. The island of Hawaii with its variations in climate and elevations has possibilities of growing a wide range of products common in the mainland temperate markets but only rarely grown in subtropical regions. Kauai and Maui are coming into their own as production areas but the growers are specializing in the products desired on the mainland markets.

Sales by growers to local retail florists are often on consignment and haggling over price and quality is not uncommon--especially during the peak demand periods at Christmas, Easter and Mother's Day. Thus, there is a wide range here in what might be called a wholesale price for each product from day to day and season to season. Anthuriums of the same quality, for example, are available from growers today at several prices. This may be due to the personal friendship existing between buyers and sellers or to their lack of knowledge of what the prevailing market price should be. A central wholesale market would provide such a daily price guide for both buyers and sellers. A wholesale market also stimulates competition, especially competition in quality. Because quality is reflected in the price, one grower tries to outdo another.

Retail florists too would benefit from a wholesale market. They would have a better opportunity to make comparisons between products, to bid on a wider range of flowers and foliage, and to be sure of a more reliable supply. The addition of new products always attracts new customers and widens the market for all in the business. Some growers and retail florists undoubtedly would resist this marketing change as do the flag makers to adding of the 49th star; but the change is on its way, we hope. The advantage of a central wholesale market would

be defeated, however, if the market was organized or operated to keep out new products and new growers.

SIZE OF PRODUCING UNITS Floral production here is carried on mostly by part-time, small growers--small, that is, in comparison to the size of floral producing units in the states. This type of production has some good but some bad features also. A good feature is that it provides some 3,000 or more growers with welcome added income, and often the only income in an emergency. Also, incomes from flowers are widely distributed, thus providing a more stable base for our Territorial economy. Small producing units have several bad aspects, however. For one, it is difficult to obtain a sufficient supply of a given type or quality of a product from one source for a volume market, such as the Mainland. Second, there is less stability in prices. Part-time or small growers generally do not consider the use of their labor, land or capital goods as costs of growing, and their first thought for selling more flowers is to lower the price. They give less consideration to the effects on the industry as a whole, or to improving quality as a means of obtaining better returns. Besides, many growers have unused resources, particularly extra labor on hand, and they enter the field of retailing to use up this extra time in disposing of their products.

A MAJOR MARKETING PROBLEM One of our major marketing problems here is the lack of specialization in growing and selling. Retailers are often growers and wholesalers as well. Many shippers are retailers, wholesalers and growers too. As in most agricultural production, however, a trade member may be good at either growing or selling, but seldom both. The recently amended Farm Produce Dealer Law (Act 74 of the 1951 Territorial Legislature) was enacted to protect the growers from unfair and fraudulent practices when they delegate the job of selling to others. This law, if used and enforced, should help to untangle flower growing, wholesaling and retailing. This would come about through the licensing provision of the Act, rather than because all of the dealers would be in jail. Specialization in growing, wholesaling and retailing comes about gradually either as the size of the market increases, production and consumption areas become more widely separated, or increased knowledge and skill are required to perform the various marketing tasks.

WHOLESALE IN THE STATES For the purpose of comparison, let's look briefly at the wholesaling picture in the states. (I do not intend to discuss the operation or the mechanism of mainland wholesaling and retailing. We have mainland experts here in both fields to give us the details.) Mainland wholesale markets can be divided into two groups--centralized and decentralized. Actually, there is a third--the in-betweens. Centralized markets are those where the wholesalers are grouped close together, such as on the Pacific Coast, and the retail florists come to the market to buy. Usually there are three market days a week. In the decentralized markets the wholesale houses are scattered throughout the city. Good examples are Houston, Texas and Atlanta, Georgia, where the wholesalers are blocks apart. Most of the sales are by telephone and the retailer seldom comes to the market to buy. In the decentralized markets there is a tendency for strong retailer-wholesaler preferences to develop--that is, a retailer buys mostly from one wholesaler. Because of these preferences, and the fact that selling is done by phone, it is more difficult to introduce new products in such markets than in the centralized markets. A great deal depends, however, upon the attitude of the wholesaler. In the in-between markets, such as Denver, Chicago, Cleveland, and Dallas, most wholesalers are grouped together, but there are some "strays" too. (Mr. Haley's Denver Wholesale Florists' firm is an example of a "stray." It is located a considerable distance from the other wholesalers in Denver.) In these markets selling is still largely by telephone or by salesmen

who call on the retail florists. Most mainland wholesalers are in reality commission merchants inasmuch as they handle floral products (except their own) principally on consignment, and if they do buy outright, it is when a stable buying price is assured or the market is rising.

The selling on the centralized Pacific Coast wholesale markets is unique; actually it is just a stage above the development of floral marketing in Hawaii. In Portland, San Francisco, and Los Angeles, large wholesaling firms operate alongside a growers' market in which growers sell their merchandise from rented stalls. For example, the Japanese flower market in Los Angeles, located in the heart of the wholesaling district, has about 170 grower-members who own stock in the market and at the same time pay monthly rentals for their stalls.

By no means are all flowers sold through wholesale channels in the states. Many floral products, especially orchids, are sold directly from the grower to the retail florist, as here. The best orchids are frequently sold in this manner; only the seconds and left-overs are brought to the wholesale market. But mainland wholesalers are playing an increasingly important role in the movement of floral products as production continues to move away from the consumption centers, such as Chicago and New York, to outlying areas, such as Florida, California, and Hawaii.

RETAILING HERE AND THERE Retailing is the same here as there--large shops and small shops, new shops and old shops, sidewalk stands and plant nurseries. Some shops sell flowers and others specialize in fancy flower containers and arrangements with only a touch of flowers. The trend among mainland florists appears to be toward selling more fancyware and designs containing fewer flowers. This is regrettable, perhaps, but it does favor the use of Hawaiian flowers and foliage because they are considered modern and adaptable to modern designs. The eastern consumers still prefer a nice, large basket overflowing with the less expensive flowers, but modern designs are making inroads even there. Coming rapidly into the mainland marketing picture to supply the wants of the middle and low income groups with corsages, cut flowers and indoor plants are the five and dime stores, supermarkets and others. This development has many mainland retail florists concerned about their future, which is one reason why they are generally opposed to our marketing policies of selling flowers, especially vandas, through these non-floral outlets and in promotion channels.

ALLIEDS! There is also a trend on the Mainland to greater cooperation among all growers, wholesalers and retailers to promote the sale of flowers and to take action on industry-wide problems. The common name for such an organization is the "Allied." The Florists and Flower Growers Association on Oahu is the only floral organization here resembling an "Allied." This afternoon is devoted to organizations for marketing, and I am sure the subject will be thoroughly discussed at that time.

SLIDES AND COMMENTS At this point I wish to depart from a prepared text and resort to slides. Educators say that the average person remembers only 10 percent of what he hears but 20 percent of what he sees. With slides, therefore, you will get more for your money.

Retail Florists' Sales--Here and There

Assuming that Hawaii is the 49th state, how do our sales compare with mainland retail sales by states (Table 1)? With \$2,206,000 in sales through retail florists, not including lei sellers and nurseries, Hawaii ranked 35 among the 49 states.

Table 1.--FLORISTS' SALES BY STATES, 1948



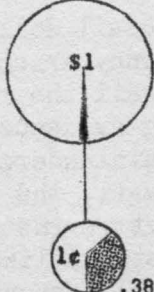





	Hawaii	Rank (Out of 49)	Average State	High State	Low State
FLORISTS' SALES	\$2,206,000	35	\$7,700,000	\$49,358,000 New York	\$515,000 Vermont
Number of Florists	100	34	300	1.861 New York	16 N. Dakota
Average Gross Sales per Florist	\$22,060	42	\$25,578	\$50.125 N. Dakota	\$16,157 S. Carolina
POPULATION	541,372	43	2,989,000	14,464,000 New York	142,000 Nevada
Sales per Person	\$4.07	1st	\$2.57	\$3.71 Nevada	\$1.09 Mississippi
Sales per Family	\$18.15	1st	\$9.05	\$11.91 Nevada	\$4.20 Maine
Sales per Retail Dollar					
					
Per Capita All Retail Sales	\$707	38	\$891	\$1.414 Nevada	\$470 Mississippi
Total U. S. Florists' Sales	\$377,250,000		Total U. S. Retail Sales		\$130,527,317,000
	(Hawaii Retail Sales \$382,680,000)				

Table 2.--FLORISTS' SALES BY METROPOLITAN AREAS, 1948

	Honolulu	Rank (Out of 35)	Denver	Highest	Miami. Florida
Number of Florists	80	21	78	1,831 New York	75
FLORISTS' SALES	\$1,692,000	29	\$2,333,000	\$46,844,000 New York	\$2,178,000
Average Gross Sales per Florist	\$21,150	--	\$29,910	\$25,583 New York	\$29,040
POPULATION	372,000	34	476,900	12,652,074 New York	410,000
Sales per Person	\$4.55	4	\$4.89	\$5.07 Dallas	\$5.31
Sales per Retail Dollar					
					
Per Capita All Retail Sales	\$768	35	\$1,247	\$1,417 Miami	\$1,417

The low state in sales was Vermont with only \$515,000 but the average state sold about three times the value of flowers that we did in Hawaii. In the number of florists--with 100 here--we ranked 34 out of 49. North Dakota had only 16 florists, the lowest number, but those 16 florists in 1948 had the highest average gross sales per florist--\$50,125. The average florist in Hawaii did less than half that volume of business.

When it comes to sales per capita or per family, Hawaii outranked all of the other states by a wide margin. Per capita sales in Hawaii were \$4.07 as compared to only \$2.57 in the average mainland state while the residents of the next high state, Nevada, bought only \$3.71 worth of flowers. In per family sales, Hawaii with \$18.15 per family was twice as high as the average state.

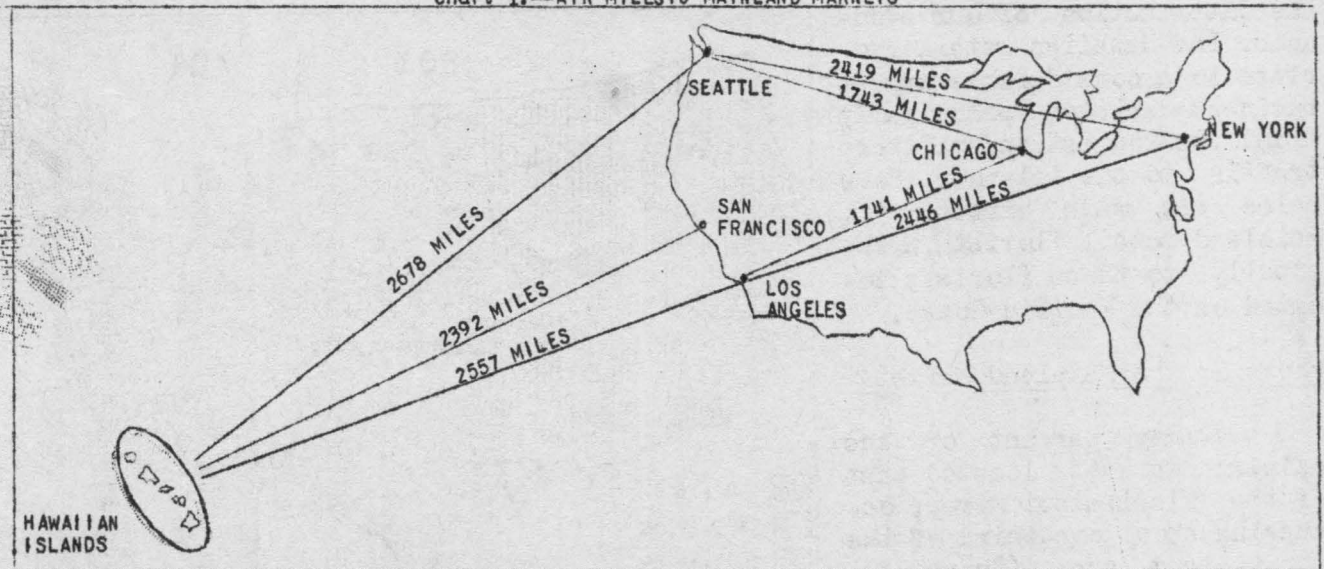
Out of every retail dollar spent throughout the United States in 1948, only 29 percent of one penny or about a quarter of a cent was spent for flowers in flower shops; in Hawaii the figure was exactly double, or 58 percent, which is added substantiating evidence that Hawaiian residents use flowers much more extensively than do Mainlanders. If mainland consumers doubled their consumption to match that of Hawaii, the flower industry would really be big business. An interesting sidelight is that Hawaii had very few retail dollars to spend per person. Moreover, states like South and North Dakota, having about twice the number of retail dollars to spend per person than did Hawaii, used just slightly more than a tenth of a penny out of each dollar to buy flowers.

About the same relationships prevail when comparisons are made among metropolitan areas (Table 2). In this table flower sales in the Honolulu metropolitan market are compared with 34 other cities of about equal or greater population than Honolulu. Individual comparisons are made with Denver, Colorado, and Miami, Florida, another mecca for tourists. From the standpoint of per capita sales, the Honolulu average is exceeded only by the cities of Miami, Dallas, Texas and Denver. From the standpoint of flower purchases out of every retail dollar spent Honolulu leads all other metropolitan areas by a wide margin with slightly more than half cent being spent for flowers out of every consumer dollar expended. New Orleans, Louisiana, ranked second in this respect. Residents of that southern city do not have too many dollars to spend on the average; but out of every dollar they do spend, almost half a penny goes for flowers. Church holidays and memorials play an important part in the culture of the New Orleans area and are commemorated with an abundant use of flowers. If Hawaii can sell its Aloha spirit on the Mainland, the effect would show up in flower sales as well as in Hawaii's floral export to the Mainland almost immediately.

Where Are We from the Mainland Market?

The Hawaiian Islands straddle latitude 20° N.--in line with Mexico City, Cuba and Puerto Rico to the east and the Marianas, Formosa and Hong Kong to the west--about 2557 great circle miles from Los Angeles, 2392 great circle miles from San Francisco and 2678 miles from Seattle (Chart 1). The air freight rate from Hawaii to these coast points is the same, while the air parcel post rate is the same to any point in the United States. New York lies another 2446 miles from Los Angeles and just slightly less from Seattle. Chicago is 1741 from Los Angeles and about the same from Seattle. Since air freight and air express rates in the states are based on distance and weight, then for most destinations in the United States, it is cheaper for Hawaiian exporters to ship through Los Angeles than through either San Francisco or Seattle. This is especially true if the shipments are destined for the southern and southwestern markets which are important markets for Hawaiian products, as will be explained later.

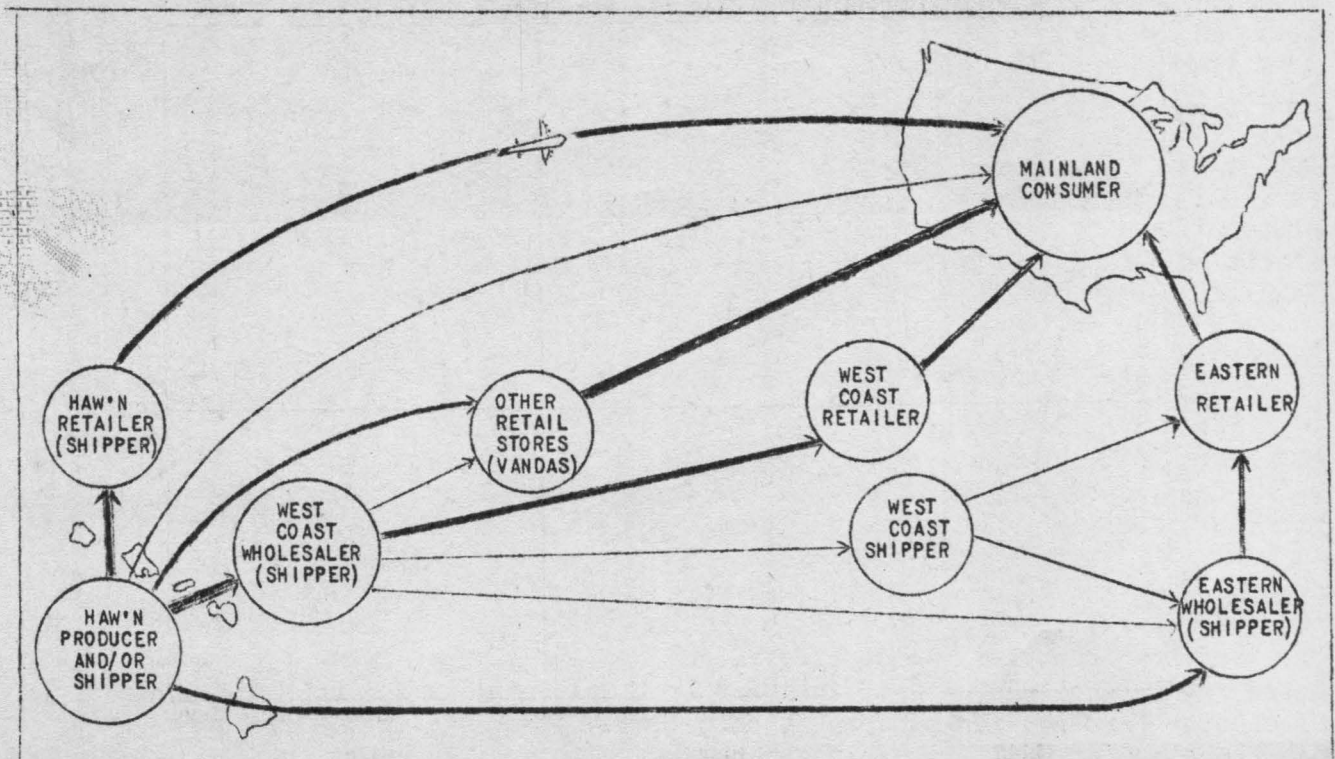
Chart 1.—AIR MILESTO MAINLAND MARKETS



How Do Our Products Get to the Mainland Market?

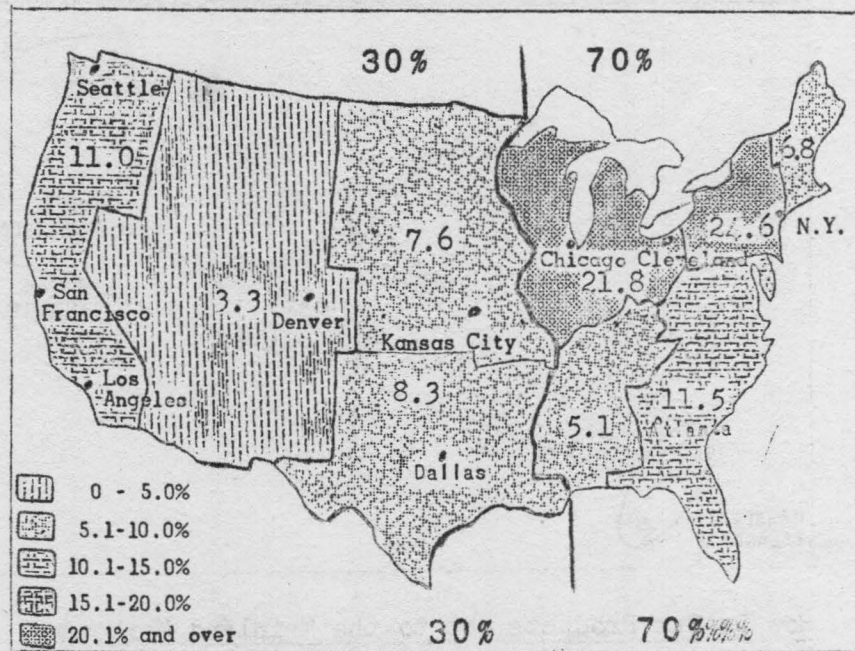
The bulk of our products, except vandas, have been moving to mainland retail florists and consumers through Pacific Coast wholesalers, who sell the products in their own locality or transship them with California-grown merchandise to the southern and eastern markets (Chart 2). Vandas, which are sold principally for promotional purposes, may be sold through wholesalers or directly to the store or firm (generally a non-florist firm) giving away or selling the vandas. Since vanda sales constitute such a large portion of our total sales, this is perhaps

Chart 2.—CHANNELS OF COMMERCIAL MOVEMENT OF HAWAIIAN FLORICULTURAL PRODUCTS TO MAINLAND CONSUMERS



the most important channel for the distribution of our products. The Hawaiian retail florists do a considerable export business arising principally from the tourist and military traffic to the islands. Some sales are made directly to mainland retail florists, principally to those florists located on the Pacific Coast.

Chart 3.--FLORISTS' SALES BY REGIONS, 1948



Where Is the Mainland Market?

Seventy percent of the mainland market is located east of the Mississippi River, occupying about one-third of the U. S. land area (Chart 3). Approximately 45 percent of the floral sales occur in the eight states of Michigan, Wisconsin, Illinois, Indiana, Ohio, Pennsylvania, New York and New Jersey. This is the industrial heart of the nation and is the farthest away from Hawaii, as is shown on Chart 1. Our products must traverse two-thirds of the U. S. land area to reach this principal market; consequently, transportation charges are quite large. Unfortunately, the prices we have received in that northern market to date are usually not much better than those we receive on the Pacific Coast market, which in 1948 accounted for about 11 percent of the total U. S. flower sales. The 25 cities

Chart 4.--MONTHLY SALES OF MAJOR FLORISTS' IN THE UNITED STATES, MARCH 1947-DECEMBER 1949 (January 1948 = 100)

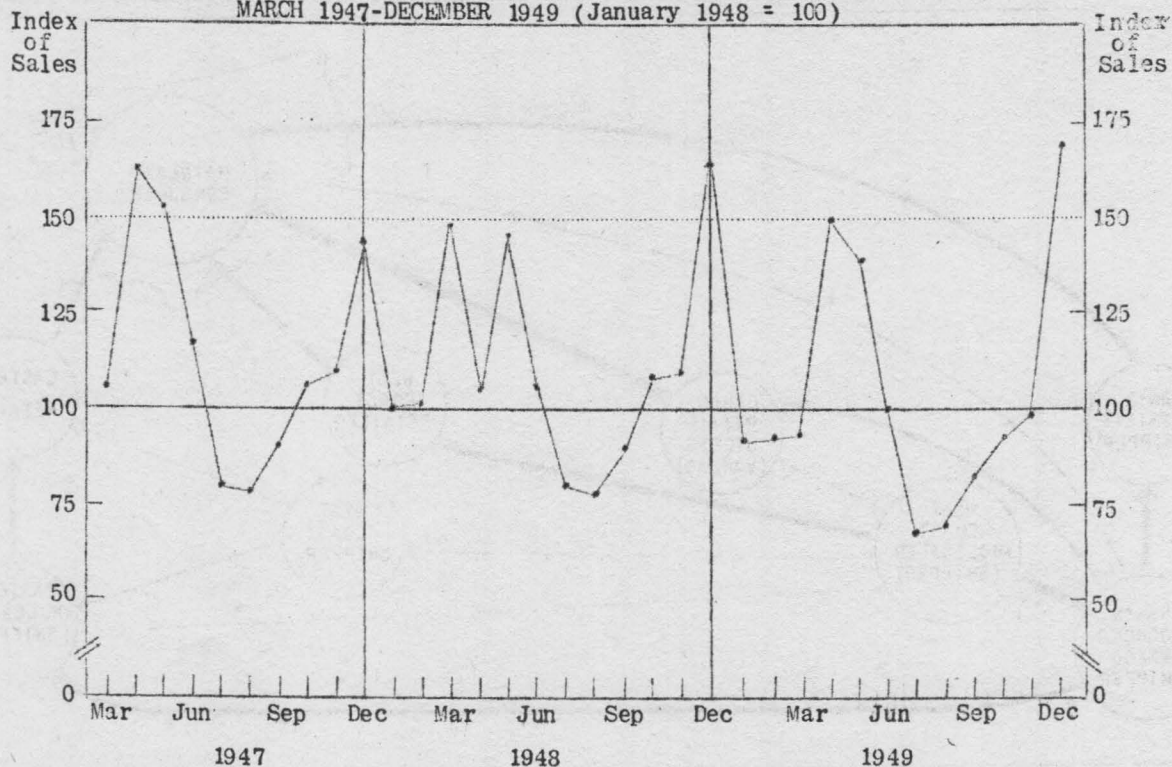


Table 3.--REGIONAL RETAIL FLORISTS' SALES AS A PERCENTAGE OF TOTAL U. S. SALES, 1939 AND 1948

Region	1939	1948	Region	1939	1948
	Percent			Percent	
New England.....	10.0	6.5	West North Central.....	8.0	7.0
Middle Atlantic.....	29.5	25.0	West South Central.....	5.0	8.0
South Atlantic.....	8.5	11.5	Mountain.....	3.0	3.5
East North Central.....	22.0	22.5	Pacific.....	10.0	11.0
East South Central.....	4.0	5.0			

in the United States having a city population of more than 250,000 accounted for about 50 percent of total floral sales in 1948.

When Is the Mainland Market the Best ?

Chart 4 shows that flower sales are not the same from month to month and year to year but vary considerably, particularly from season to season. The same pattern prevails in every region and city in the United States. The winter and early spring seasons, containing the holidays of Christmas, New Years, Easter, Valentine's Day and Mother's Day, account for the bulk of the sales in the floral trade. During August, right at this particular period, sales are at their lowest and that is the reason why Mr. Haley, Mr. Sykora and Mr. Goepfner can be with us. They don't have anything to do so they either attend conventions or go fishing. This summer slump in the Mainland is reflected in our export sales here; we must recognize this in planning our production and marketing policies. The funeral and wedding business are about the only activities requiring the services of the florist until the social season begins again in the fall.

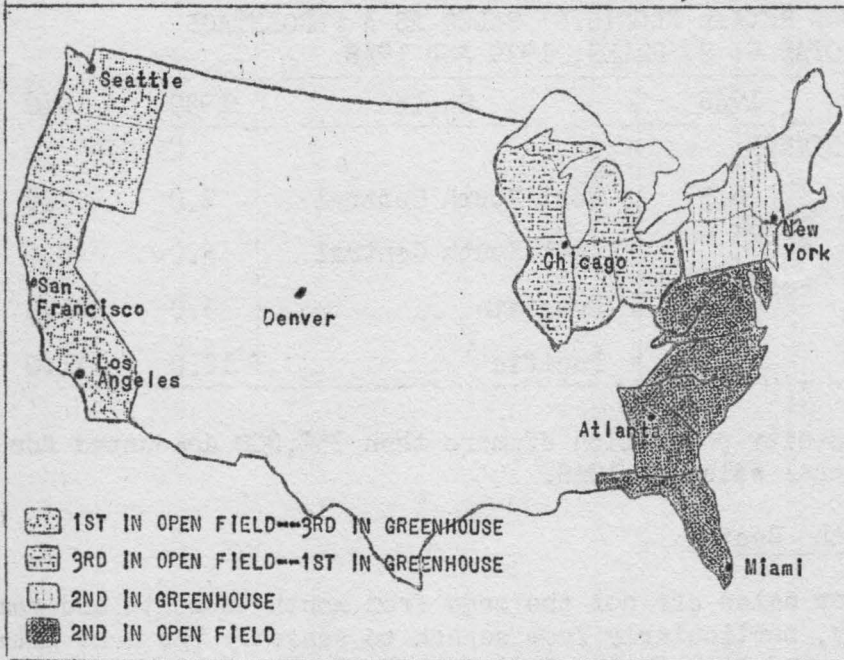
What Is Happening to the Mainland Market ?

In chart 3, I showed that the bulk of the market is east of the Mississippi River and is especially concentrated in the area between Chicago and New York. That was true in 1939 and 1948; it is true today, but there has been a tremendous shift taking place in flower sales. The greatest increases in sales between 1939 and 1948 took place in the south and southwest. This is evidenced by the large increases in the number of florists in those areas, while in the northern areas the number of florists actually declined. Another indication is the relative importance of the several regions as a percentage of total U. S. flower sales in 1939 and 1948. This percentage ranking is shown in table 3 and indicates that the Middle Atlantic region, containing the states of New York, Pennsylvania, and New Jersey, decreased in importance from 30 percent to only 25 percent of total U. S. sales from 1939 to 1948. The greatest decline was recorded by the New England states, where relatively a small use is made of flowers. The greatest increases took place in the southern states as indicated by these figures.

This shift in sales is of importance to Hawaii for a number of reasons:

- (a) It is much easier to introduce new flowers in an expanding market. The New England and northern markets are the oldest markets and have established habits and customs that are difficult to overcome.
- (b) Production in the southern and southwestern states, except along the Atlantic Coast and in Florida, is not too well

Chart 5.--FLORAL PRODUCTION BY REGIONS, 1939



developed. Exporters, therefore, have less competition with their products in these regions and there is less likelihood of established grower-wholesaler tie-ups prevailing that might tend to restrict the entry of new products.

- (c) Expanding areas are likely to adopt the new modern designs to which Hawaiian flowers are especially adapted.

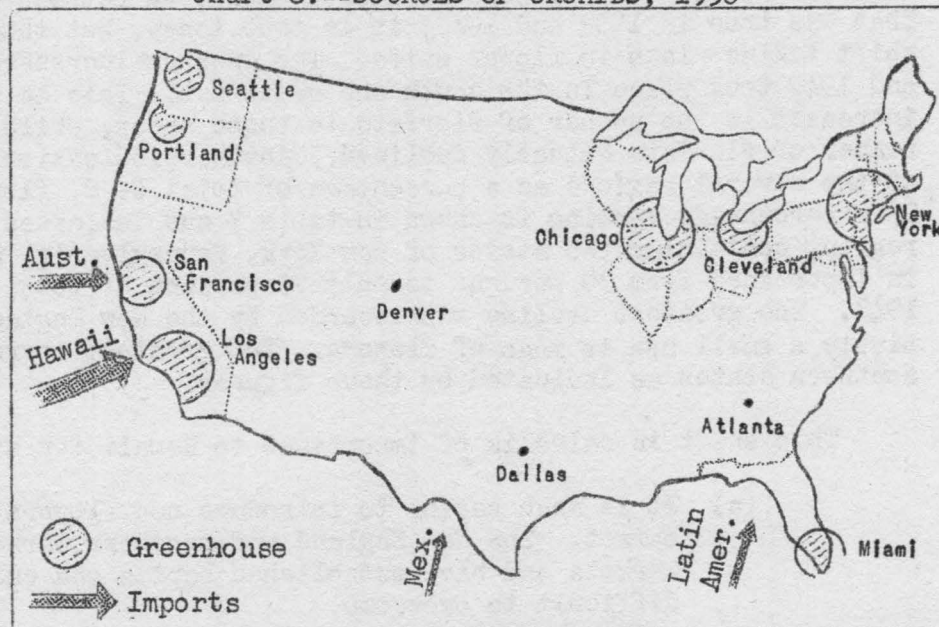
Where Is Our Competition in the States?

The latest production data available are those for

1939; the 1950 agricultural census data are as yet not available. In 1939, the Pacific Coast region ranked first in open-field production followed by the South Atlantic region and then by the East North Central region centering around Chicago. This pattern is shown in chart 5. The East North Central region ranked first in greenhouse production, followed by the Middle Atlantic region and then by the Pacific Coast region. Just because I show no production in the rest of the United States does not mean that no floral production takes place there. The production in the remainder of the United States is limited or specialized, however, and not too important from the standpoint of concentrated competition.

When the 1950 agricultural census information is released, it should show a sizeable shift in production from the northern areas between Chicago and New York to Florida and California. Greenhouses are springing up rapidly in Florida, while floral greenhouse area is supposedly decreasing in the north or is being converted to other products, such as subtropical plants. Open-field production in California has also increased substantially in the ten-year period between the two censuses.

Chart 6.--SOURCES OF ORCHIDS, 1950



Where Is Our Competition by Products?

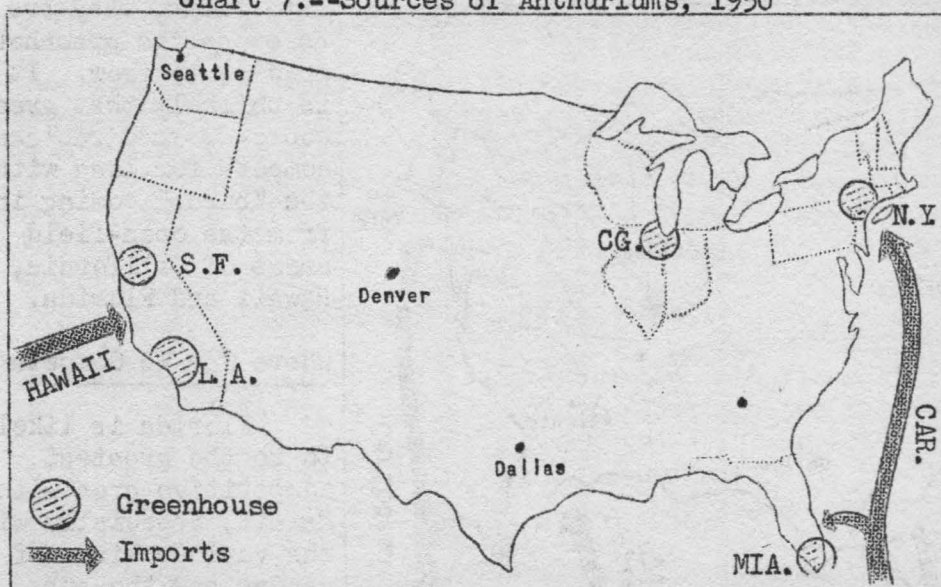
I cannot provide statistics on quantities grown in the various areas or on the volume of flowers or foliage imported; all I can show is the relative importance of each production area or source of imports. This holds true for all of the competitive products shown in this series.

Orchids (Chart 6): Orchids are grown in greenhouses around the major market areas throughout the United States, except in the south and southwest and the extreme north. Large imports of cymbidiums are under way now from Australia, while the bulk of the vandas come into the states from Hawaii, although Florida is increasing its plantings of vandas rapidly. Many vanda cuttings, seedlings and plants are being shipped into Florida from Hawaii. Some cattleyas and vandas have been imported from Mexico and Latin America, but the recent hike in import duties to 25 percent ad valorem has choked off much of this competition. Cattleyas are still the most popular orchid on the Mainland, but they are being overproduced in almost all markets. The cymbidium is rapidly coming forward as the number one favorite, particularly on the Pacific Coast.

Anthuriums (Chart 7): Relatively few anthuriums are grown in the states, and the bulk of them are grown around San Francisco and Los Angeles. Imports have been coming into the eastern markets from the Caribbean area, especially Puerto Rico. Anthurium production is being expanded around Miami, Florida. Some anthuriums are grown around Chicago and New York, but they are an expensive crop to grow in greenhouses and most of the production takes place in conservatories or in greenhouses where costs are not considered essential in determining the success of the operation. Most of the anthuriums grown in the states are pink or pastel colored, while imports from Hawaii are principally the dark-colored varieties. Sales of anthuriums in the states have increased as a result of the importation and promotion of Hawaiian anthuriums.

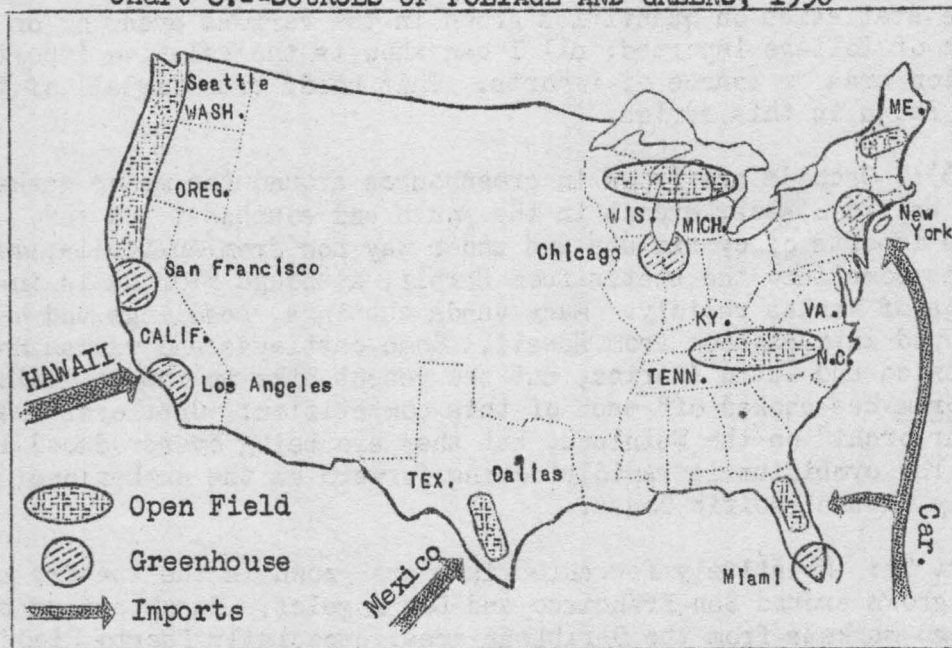
Foliage (Chart 8): Foliage and greens of all kinds are very popular in the mainland markets. The greatest volume of greens, particularly Oregon fern, rhododendron, salal (lemon) and huckleberry, comes from the northwest. Ninety percent of the fern used in the United States originates in this region. The ferns of

Chart 7.--Sources of Anthuriums, 1950



Maine and Michigan are too soft to compete with the hardy Oregon fern. Maidenhair and asparagus fern are generally grown in greenhouses around the major market centers, but especially in Florida. Various types of foliage and dry materials are gathered from the mountains throughout the east, and they are being imported from the Caribbean area and Mexico. Hawaii's foliage is considered new and modern, and is

Chart 8.--SOURCES OF FOLIAGE AND GREENS, 1950



competitive principally with the Oregon and maidenhair fern. Comparative prices, however, give the edge to the mainland foliage and greens.

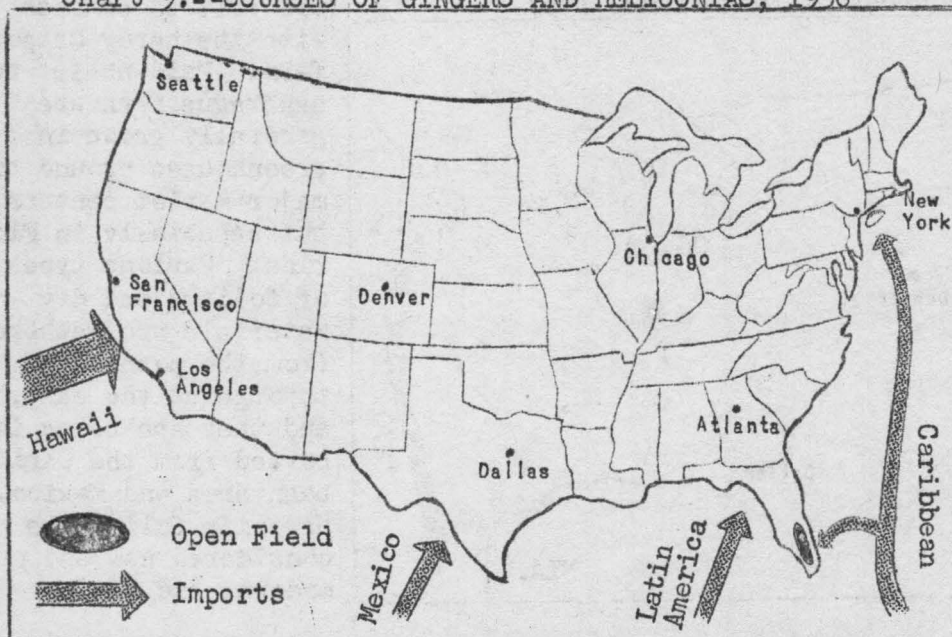
Gingers and Heliconias (Chart 9): Very few gingers and heliconias are grown commercially in the United States, consequently, the bulk of these heavy items are imported either from Hawaii or the Caribbean and Latin American areas. Some heliconias enter the Texas market from Mexico. Generally,

Hawaii has little competition with these items, except that the weight of the products and the costs of transporting them makes the selling price too high for general usage in retail florists' shops.

Birds of Paradise (Chart 10): The greatest competition to Hawaii on this product comes from California's open-field production around San Diego and Santa Barbara. Acreage in "birds" is increasing and California "birds" can undersell Hawaiian "birds" in all markets, except perhaps in the northwest. California production is seasonal--generally from October through March--and is occasionally interrupted by heavy winter frost. New acreages of "birds" are being planted in Florida which means added competition in the eastern markets for both California and Hawaii producers. Some "birds" are produced in greenhouses around Chicago

and New York, but like anthuriums, they are an expensive greenhouse product to grow. It is unlikely that greenhouse-grown "birds" can compete for long with the "birds" coming in from the open-field areas of California, Hawaii and Florida.

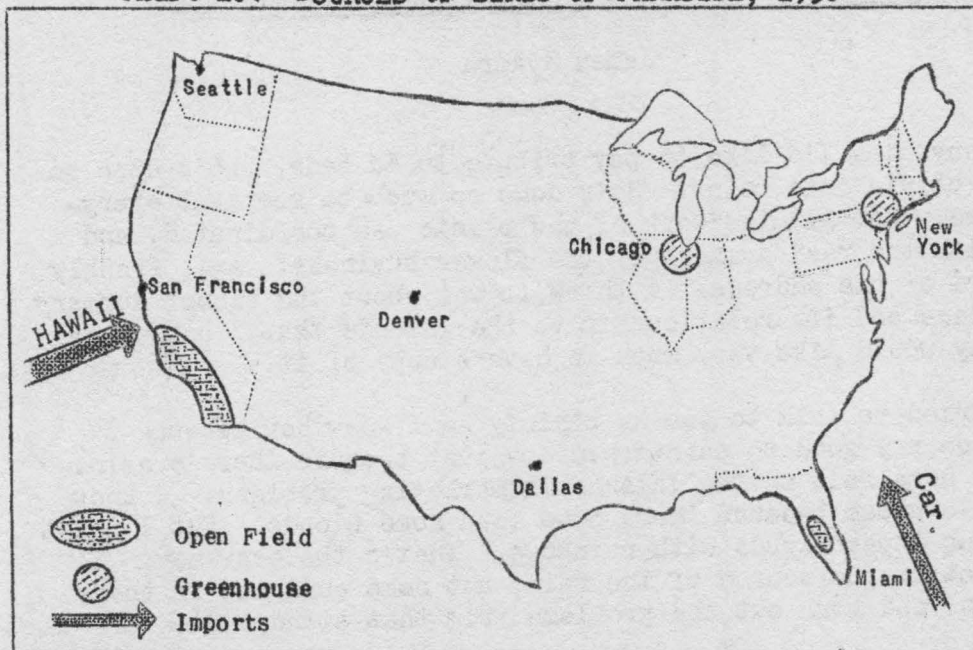
Chart 9.--SOURCES OF GINGERS AND HELICONIAS, 1950



Where Can We Compete

Florida is likely to be the greatest competitive area with Hawaii, especially with the various kinds of vandas and the subtropical floral products. If competition

Chart 10.--SOURCES OF BIRDS OF PARADISE, 1950



is considered only on the basis of freight costs, Florida shippers have an advantage over Hawaiian shippers anywhere east of the Rocky Mountains (Chart 11). If air parcel post is used, Florida shippers have an equal advantage with Hawaiian shippers in the region west of the Rockies and a decided advantage in the entire area east of the Rocky Mountains.

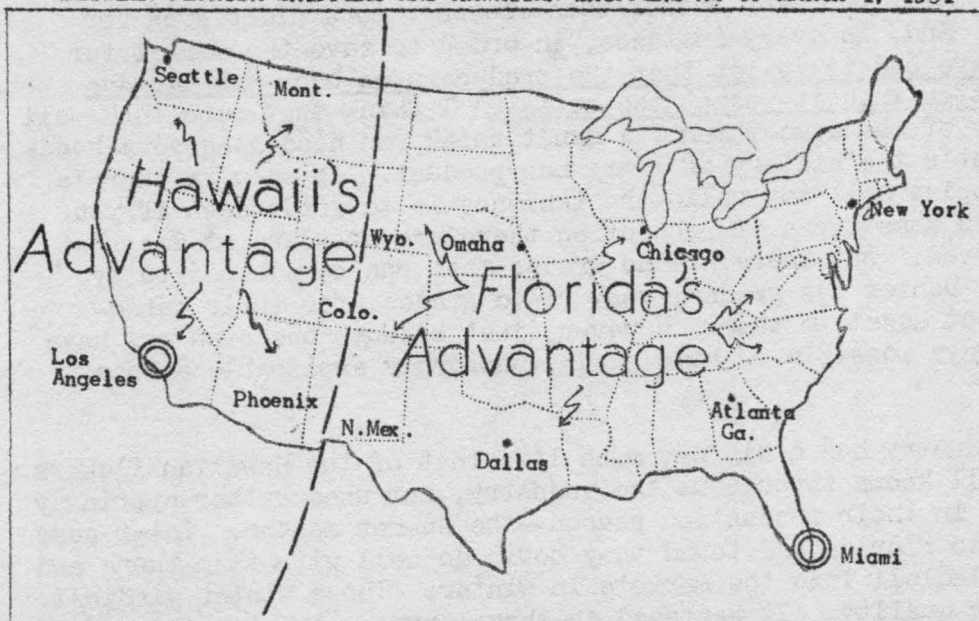
California shippers move their products in the same direction that we do

and have a decided advantage over Hawaiian shippers in all markets, except perhaps in the extreme northwest. Beyond Chicago they lose their advantage if air parcel post is used. California shippers, as do all mainland shippers, have many alternate forms of transportation available to them and, therefore, on the basis of freight costs can out-compete in the markets with an area, such as Hawaii, whose markets are limited by distance and availability of transportation facilities.

Conclusions:

That takes care of my slides and time. I have but one thought to leave--expressed in terms of the battlefield soldier who thought of winning battles in terms of the "fustest" with the "mostest." We have entered the market "fustest"

Chart 11.--COMPARATIVE FREIGHT ADVANTAGE IN THE MAINLAND MARKET BETWEEN FLORIDA SHIPPERS AND HAWAIIAN SHIPPERS AS OF MARCH 1, 1951



with the "mostest" of many of these items, but our competition is not dormant, and in order to remain in the market we not only have to be "fustest" with the "mostest" but we also have to come in with the "bestest." I have drawn the outline; it is up to the artists who follow to fill in the details.

1/ Based on air express costs from Miami, and air freight from Hawaii to Los Angeles and air express east of Los Angeles for a 25-pound vanda orchid shipment.

A WHOLESALER'S VIEW OF HAWAIIAN FLOWERS AND FOLIAGE

James Sykora

Before I say anything I'd like to pay tribute to Ed Rada, who's done so much to bring this clinic into being. He's done so much to see that everybody had a good time, that all the work of the clinic was coordinated, and then he comes up with the real summary of the flower business. And, frankly I enjoyed every word of his address. I think it was about the finest summary of the flower business and its relationship to the Islands that I have ever heard. I personally would like very much to have a copy of it.

Yesterday, I tried to talk to you as plainly as I knew how because I don't believe it does any good to paint rainbows just because there's rain. I know there's been some rain on the Islands in marketing problems. I know there's been a little gloom because there have been some clouds. But I don't believe in dispelling those clouds with rainbows. That's the easy way. I think you have to get at the source of the rain, get some sunshine in there without the rainbows, and work out the problems from that standpoint.

QUALITY In order to evaluate the flowers of Hawaii from the wholesaler's standpoint I'd like to refer again to what I said yesterday. Our experience had not been too good primarily because, I think, you grew up too fast. We have had exactly the same thing with new foliages in the states. We've had rhododendron and magnolia leaves come into very common use. In the last few years pittosporum became very important and sold very well. In every single case with these three types of foliage, and I could name some others where the history would be the same, we had beautiful foliage to start with. When we had our retailers begging for it, the quality started to drop off. Of course, there are always two reasons for it. First, the growers get a good return for the foliage they send in and they become so anxious to get more of that easy money that they become less careful in picking and packing. The other reason is that as it becomes accessible and desirable to the retailer, he uses more of it, but the easy sources of it are used up and the growers naturally take inferior production rather than search into a wider area for better foliage. And, in every instance, in order to save the market for those foliages we have had to insist that the producers go back and improve their quality to better than it was at the outset. I think that here in Hawaii you have been guilty of the same thing. I don't think you need hang your heads in shame because that's the history of every new product. As soon as there's a demand--even if apples sell too well--the tendency is to grade down if you can. Fortunately, in some types of production there are standard grades that can be rigidly observed. But there are no grades that can be adhered to by the flower growers. Denver has grades, very rigid grades, for their carnations and it's a great asset to them. However, just because one area can have grades, it's not always possible to have grades uniformly applicable across the country.

The gladioli industry has a history much like that of the Hawaiian flowers. The gladioli were well known throughout the industry, but used rather sparingly and then principally in their production season--the summer months. Later some growers took them into Florida and found they could do well with them there and proceeded to bring gladioli into the markets in winter. Those winter gladioli were really very poor quality. It happened in those days, which is now some 25 years ago, that in January and February we (Chicago) ran out of flowers

completely. Our production in the greenhouses was practically nil then. Science has since taught us how to bring our flowers into production in January so that we don't have that dearth of flowers. It was only because of that dearth of flowers, however, that the gladioli grew in popularity even though the quality was not good. As soon as science taught our growers how to produce flowers in the greenhouse during the winter, Florida had to grow a better quality of gladioli. The growers had to produce better varieties, flowers that would stand shipment and flowers that would open up and give satisfaction. They would have lost the market if they had not improved. That is evidence that your problems of a new flower brought into use and circulation in the market is history repeating itself. Therefore, you need to follow the pattern that has been set already.

VANDA MISS You have one thing in your flowers that we haven't had to contend with as we have with so many other flowers. That is the ready availability of your flowers, such as the Vanda Joaquim. You get so many vandas and their reproduction is so rapid that it's difficult to see where the end is. Most production of other flowers is eventually limited by increasing cost of production. That cost is relatively slight for this one particular flower, which up to now, at least, has given you the bulk of your income. Though that cost is relatively slight, you have given very little attention to improving its quality. There is work going on at the University at the present time to improve quality, such as using brominated charcoal to prevent losses due to ethylene gas, so that they do not lose color. This morning Mr. Hanson told me that he is doing considerable work here at the University with flowers and foliage that is relatively new. The tendency of every grower is to think, "There's our problem solved." Even though a method of using brominated charcoal is perfected so that the flowers will not lose color rapidly, you'll find that the growers will still have a real problem developing a lasting quality. It is no different with any other flower produced. In our travels around the Islands we saw terrific differences in Vanda Joaquims. We saw places where the flowers were very much larger than they were in other places, flowers that had more color, and variations resulting from crosses.

I think that there are two things that must be done if you are going to sell vandas successfully and sell more of them. You have to grow Vanda Miss Joaquim better than you have up to now. You have to improve its color, size, and keeping quality, which I know you can do by more careful application of the principles involved in growing. Your salvation may be in some of those very beautiful crosses that we saw. We have not been able to get flowers of that kind on the Mainland, probably because you haven't been shipping them. I think that you have had a demand right here for those better colors and forms, but you should be shipping some of those to the Mainland, if you aren't now. We have had some vandas coming in from Mexico City, but we were unable to develop a market for them. Those vandas, almost in every case, were flowers with narrow, twisted sepals and petals. They were not the flat types that I notice you are developing in your hybrids here; many of them are exceptionally lovely. They appear to have a good keeping quality although that can only be found out by test. You should stress quality in your growing and you've got to have the courage to discard some of the poorer stock before you attempt to develop the market.

I know that many of you have been very unhappy and discouraged about the net return to you for your vandas. I know also, from discussing it with some of you, that you have made no attempt to understand the process of marketing. Perhaps I should not blame you; perhaps I should blame those who are doing the

marketing. Perhaps they should have gone out of their way to make it plainer to you. They should have been willing to take the arrows and the blows they might get in painting the picture clearly, but I think they should have painted the picture clearly.

When you talk about a thirtieth of a cent for vandas in the Islands, as I have heard many of you say, I think you should understand that those vandas were not sold for a thirtieth of a cent. You should remember that out of your production you must deduct the number thrown away before they ever get onto the airlines or whatever mode of transportation is used. Then find out what proportion of those shipped are sold, but do not forget that many of your flowers are actually dumped when they get there--they are worthless. Many more are dumped, if there is no market. Of that fraction finally sold and for which the money is received, deduct the selling commissions and other costs, and divide the balance back into your production which gives you that very low figure. Don't forget that the poorer the quality, the smaller the percentage of flowers that will sell. It is very uneconomical to harvest a lot of poor flowers, package them, ship them, and dump them.

There is a question in the minds of many people as to what a wholesaler calls dumpage. I know that if each of you were at the other end of the line in the states, you would see many a box of vandas that was practically colorless upon arrival. It might be due to ethylene gas formation in that shipment, but it also might be due to the fact that you shipped poor flowers that looked all right at home. They may have hardened up fairly well in conditioning, but actually they were not of first quality when they were picked, graded and packed. To eliminate those losses is your first saving and the first step in getting more money for them.

Now, what is the value of the vanda to the industry, its potential to the Hawaiian flower industry, and to you as growers and producers? It would not matter how they were sold as long as they brought an adequate income to leave you something after deducting costs of production, grading and handling. If they are to be a permanent thing in the floral industry, however, there must be a way to make them valuable to that industry. I think they have that possibility. It is very essential that you have the choicest possible quality if you are going to move vandas to the mainland floral industry. You must concentrate on the plants that have size, that have color, that have keeping quality, and try to discard those with poorer characteristics. I think, as I said before, that you need to concentrate on the selection of crosses that are fitted to the flower industry. Eddie Goepfner made a suggestion in the field the other day in connection with these vandas. He suggested a different use. I won't go into detail but I think that his suggestion is a key to making your flowers of more value to the industry. You must find newer ways to use the same products that you have been shipping for the last four years, and I think your University here is very well adapted in helping you find newer ways to use those flowers. Because the vanda has been employed largely in commercial promotions of various kinds, it has been set back materially in the favor of our retail florists. There's a way of maintaining a great deal of that promotional outlet for vandas without being in trouble with the mainland flower business. We have done it with roses and carnations and some of it is being done with vandas now. Suppose you have a possibility of selling a thousand vandas for a promotion. Properly handled, that order could be channeled through a retail florist. I am not telling you that you must do that, but I am pointing out to you that it can be done. You can win back the good favor of the florist for the vanda because it has been done with other flowers.

HELICONIAS AND GINGERS Let's go on to your heliconias and gingers. I told you yesterday about some of the things that militated against the possibility of our selling more of them. We tried conscientiously to make them attractive to our florists. I made the mistake of calling that beautiful, lovely, white wax coating on those flowers mildew. I am told that nature provided that delicate, white whisker on those plants and it appeared to be a sacrilege on my part to talk about removing it. I am still going to take a chance and say that I think that as far as my customers are concerned, it will help to take that lovely white coating off; perhaps you can accumulate enough in the process to use it somewhere else. But I know this--that when we got those flowers, they wouldn't sell at all. We put them into cans, we tried to arrange them, and they did not move. Disgustedly I walked around those cans for two or three days. Finally I grabbed a cloth and some Floraglow and began to wipe them off. I found that the lovely white coat came off, and underneath was a brilliant sheen. Thank goodness, there was something that, at least to my untutored eyes, seemed to make them look better. After I had cleaned them up, we sold them within the next hour. I gave an order to our boys that every-time a Hawaiian shipment of birds of paradise, heliconias and the rest came in, we would take that lovely white coat off and expose the brilliant finish of the foliage underneath. Then we did much better with them until, as I indicated yesterday, the growers and shippers thought it was too easy. They did not have to select so carefully any more. They did not have to go out and pick the birds of paradise that had nice, big blooms just breaking out of the sheath, and it was all right to cut the stems shorter to save express costs. The result was we lost out--our people quit buying them, and we had to quit handling them. I am going to say to you that there is a definite place in the flower business for more of your merchandise than we have been handling. Of course, the flowers must be on a price level at which we can sell them. You can price yourself out of any market. With anything as heavy as gingers and heliconias transported as far as they must come, it is easy to price oneself out of a market.

I talked to one of your growers the first day I was in Hawaii and asked him why it wasn't possible to produce the birds of paradise and heliconias on lighter stalks. "Oh," he said, "we can, and we're doing it." I said, "Is that so?" "Yes," he said, "here's one," and he showed me a plant. I think he has something there. He said that he did not like it because it did not keep as well as the heavier flowers. "Of course," I said, "keeping quality is very important." Having produced a plant that yields a good flower on a lighter stem, I am sure, means it can be bred or handled to yield a better keeping quality. I know that we could find a place in our markets for those lighter plants, lighter flowers, and lighter stalks. There again is something for you to shoot at. If some of these things can be produced with a lesser weight, they also will have a more varied use in flower arrangements. There is a use, but a limited one, in the flower business for heliconias, gingers, and similar flowers.

If you are to expand the production and the sale of those flowers, it can be done only by having the goodwill of the distributors on the Mainland. The wholesale distributors, if they are not friendly to these flowers, if they cannot see a possibility of making a few dollars for themselves, can certainly divert their customers away from them. No retailer, except the very largest, is going to import these things directly in any quantity. Unless he has special use for them, he is going to lose too many out of every other shipment, if he orders directly. That becomes very unprofitable.

ANTHURIUMS I spoke about anthuriums yesterday. I have seen more anthuriums on the Islands under cultivation than I realized were available here. They are lovely and they are in colors which we do not ordinarily have for sale. All of the colors but the light pink seem to have been eliminated from those that are produced in the mainland greenhouses. There are a few dark red, orange red, and a few whites, but mostly light pink. It is true that we have tended to go away from harsh colors in the flower business on the Mainland and we have tended to concentrate more and more on pastel shades. Sometimes the harsher colors are used as a contrast in feature arrangements. I personally have always liked the bright anthuriums. The pinks are lovely, the whites are lovely, but I have always felt that there was a place for the orange, deep orange, and deep red anthuriums. Seeing them here as they are at their best, I am quite satisfied that we can develop a sale for a great many more anthuriums than are now coming to the Mainland, and at a fair price to you.

Again I say, you must concentrate on quality. One of your growers mentioned yesterday that some plants produce only three flowers, some produce as many as five, and some perhaps even seven. I think it is very important that you concentrate on plants that are prolific and still produce good flowers that have lasting quality. Do you remember the transportation man who mentioned one of his problems with anthuriums and nobody gave him the answer? (The problem was whether anthuriums should be placed under refrigeration or kept out of the icebox.) I'm surprised at you growers. He said that he wanted to know what to do with the anthuriums. I'd like an answer to that question too. We get anthuriums that "flag" down, and anthuriums that turn black. I always thought that this was more a question of age. Am I right about that? Anthuriums come in looking beautiful and then in two days they are black, not due to freezing either. Would age do that? At any rate that is one thing that needs to be watched. In all the years that I have handled anthuriums, I have never been sure that even though they looked fine when we got them, they would not end up black and unused. It may be immaturity or too much maturity. You should study that and try to cut your flowers going to market at the optimum stage in their growth. It is very important. They should be cleaned and should not have sediment on them. Even here on the Islands you get some slight coating on them that takes away their luster. It may be a salt deposit from the moist air. I noticed that some of them are not as brilliant as others. Of all flowers the anthurium should be just as sparkling and bright as you can possibly make it.

Your handling is a great deal better than it was when we gave up bringing them in from the Islands, but you cannot handle them too carefully. Anthuriums look like flowers that can stand some punishment but actually they show bruise marks when they are creased in the handling or from rubbing when one flower overlies another. There is definitely a much wider usage for anthuriums ahead of you.

FOLIAGES This ought to cheer you up. I think that the Mainland is definitely foliage conscious. The Mainland has gone foliage-crazy in the last five or six years. That is why we were able to bring in pittosporum, magnolia, and rhododendron in quantities. Even laurel, which is very common in appearance, is being used a great deal and it is not being used in cheap arrangements either. So, anything that is a new type of foliage with a keeping quality and definite characteristics has a place in our markets. We started selling camellia foliage a few years ago, and before we knew it, we were doing four to five hundred dollars worth of camellia foliage business every week in our store alone. The business grew like a weed. Why? Because the foliage was clean,

was cut in stems that were easy to use, and had a good keeping quality and luster. Its growth in sales was amazing until we could not get enough of it.

You have foliages here that are as fine as can be found anywhere. Your crotons! I saw crotons here that are just amazing in their beauty. But again, there should be a study made by you and your University, a study of the types of crotons that are adaptable to the daily use of the retailer. You have many odd varieties. I am not a designer; Eddie Goepner will probably tell you a great deal about them, but I can talk to you from my observation and my experience. There are varieties of crotons that can be sold in quantity; some should be sold as loose foliage and others should be sold by stems.

There are other types of foliages here that can be experimented with in a small way provided that they are cut and packed carefully and that you use some discretion in what you send. Take your ti leaf, for example. Ti leaves achieved popularity very quickly and we sold quite a lot of them, but then they lost favor. It was because they were not selected carefully after the first few shipments. We found many that were transparent and that would not hold up. We found some slit at the ends; some had two or three slits in them. Then, you shipped colors that were "washed out" and we had others that were burnt which, according to some of your growers, was due to location with respect to shade and sunlight, and perhaps age. We have seen that ti leaves can be expanded here terrifically with very little effort, but you should concentrate on the types that can be used. You cannot have a ti leaf that is too fleshy. Is that correct Eddie (Goepner); would you say that you don't want to have it too fleshy? Yet, there are types that I have seen that are fleshy, so avoid those for commercial uses. (I don't want you fanciers to get mad at me at what I have said because if you are a fancier, you are in this business because you like the variety and not because you are commercially minded. Those of you who are trying to make a business out of it are the ones to whom I want to talk. A fancier may have a little cyrtipedium that you would not pay a nickel for, but he loves it. That is on his top shelf and he would not sell it for a thousand dollars.) You should strive to get a uniform pattern for your ti leaves, leaves that have a certain proportion of width to their length, leaves that do not have too sharp a cup so they can be stacked and used without splitting the ends, and leaves with good keeping quality and which do not burn or wilt. Then, you have a leaf that will really expand in its use tremendously.

Look at the Oregon fern. When the Oregon fern came into being on the West Coast, none of us would handle it. We were all handling the fancy dagger fern from northern Wisconsin and the northern Maine woods. It is a much prettier fern than the Oregon fern. Every florist in the middlewest and east was using these northern ferns--millions of them. When Mr. Callison, Mr. Kirk (located in the state of Washington) and some of the other pioneers started to ship in the Oregon fern, we thought they were crazy. We let them ship it in, but we did not sell it. We showed it to the retailers, and they said it was too clumsy, it was too hard, and it was too this and too that. But today the florists are all using nothing but the Oregon fern, shipped in by the hundreds of carloads. As you see, just because there is an early bad experience, that is not an indication of the ultimate marketability of the product. I think you have something very much worthwhile in your ti leaves, crotons and some of your other foliages. They have to be handled well, handled right, and you must learn how to precondition them in order to carry them to the ultimate market satisfactorily. You have done a lot of work in that direction. You have made a lot of progress and you will make a lot more.

SUBTROPICAL PLANTS

I just want to say one more thing to you. I am wondering why there isn't any attempt made here to grow the small green plants that are used in such prolific quantities on the Mainland--philodendrons, pothos, sansevieria, dracaenas and other small types. I know that every one of those will grow here like a weed. We cannot begin to get enough of them out of Florida to take care of the demand in the floral trade. There is hardly a home in America that does not have some of these plants. Growers have gone into Puerto Rico to grow them there, and it seems to me that you should be doing a little experimenting in the field of decorative plants for the homes--types that are not too heavy or expensive to transport and that can be shipped clean-rooted to avoid quarantine restrictions. Maybe I'm all out of order. Maybe you have been working in that direction. I talked to Dean Wadsworth, your Dean of the School of Agriculture who is taking a rest on the Mainland, and he said that he was very much interested in that phase of plant production because he felt that it was an opportunity to expand the business in another direction. I thank you all for the kindnesses shown me, my wife, and my friends. It has been wonderful being with you.

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HOW CAN I USE MORE HAWAIIAN FLOWERS IN OUR RETAIL BUSINESS

Edward Goepfner

HAWAIIAN DREAMS

I have had a tough problem while in Hawaii. When it comes time to sleep it's a race between pulling up the sheets and getting to sleep. I generally beat the sheets. I had a dream last night. In this dream Sykora of Chicago and Haley of Denver had their own islands out here. They pulled out all the pineapples and all the sugar cane and planted orchids. Then the telephone rang. It was seven o'clock. I found out that there was still a Floral Clinic going on this morning.

I don't know whether anyone has mentioned that the mainland floral industry does an annual volume of \$650,000,000 worth of business. That is about sixty percent more or less of all retail floral sales nationally.

PUBLIC RELATIONS OUTSIDE THE INDUSTRY

The Florists' Telegraph Delivery Association, which is only one of such floral associations, last year grossed about \$33,000,000 selling flowers by wire. The F.T.D. has some 9,000 members. With the \$35,000,000 volume we are hoping to do this year, more than \$1,000,000 has been budgeted for advertising. I happen to be on the sales and advertising committee. The Society of American Florists, whose president John Henry Dudley, is here today, and the F.T.D. will spend \$150,000 on public relations; \$75,000 of this money will be spent by the committee on "Say-It-With-Flowers-Today." We hope to induce more people to send flowers at the time of funerals. The money spent by this "Say-It-With-Flowers-Today" committee is meant to do a public relations job in such a way that we won't lose that funeral business. We want to bring back the memory and thought of the first time that flowers were sent to a funeral; it was a beautiful thought. We have no thought of hurting charities but we want to help charity to help ourselves. We must take a very definite interest in community activities and become a part of the community. We must be part of every kind of drive that occurs

for the hospitals and civic activities. We have done a very poor public relations job as florists. We cannot be continually on the getting end only. Florists can't get it all. We must give some too, and the fellow who is too busy to give time to others is never going to get very far.

I attended a meeting of the hospital staff that tried to eliminate flowers. When I told the manager that so much of our business depended on his letting our flowers into the hospital, he said he didn't want to put us out of business but pointed out all the things we were doing wrong. He said, "You get the flowers out here just as soon as we've operated on someone and we have utter confusion. You send big vases of gladioli and other great big things and in the confusion we knock them over." He got out a chart and showed me all the babies that were going to arrive in the next six months. Gee whiz, I couldn't take a chance losing all of that business. He told me more about my business than I knew myself, because I had never gone to the trouble of finding out about a hospital. Now that doesn't mean that you don't send gladioli or anthuriums to a hospital; but you do send them in a container. No loose flowers go to a hospital from the shops in San Francisco. We worked out a time schedule so that our flowers arrive there at specific times of the day--not from 8 o'clock in the morning until 10 o'clock at night. And all that was brought on by the shortage of nurses. The man who happened to get the idea of eliminating flowers was the president of the Hospital Associations of the United States. Fortunately, we got to the fellow; he was a very regular guy and he found out what our problems were, too. We got busy and issued scholarships through the Florists' Telegraph Delivery Association. We present a number of scholarships to nurses each year throughout the country and we now get our flowers into hospitals. We are working the same way with the morticians. We would have chaos in the florist business if they took the hospital and funeral business away from us.

PUBLIC RELATIONS
INSIDE THE INDUSTRY

There is at least one floral school a week going on somewhere on the Mainland--mostly through the universities and the floral associations. The wholesalers have their third school coming up next month at Ohio State University; I have been privileged to be there twice. I can tell you that the young fellows who go to this school for three days get a real going over. They are there from 9 o'clock in the morning until 9 o'clock in the evening. Their bosses send most of them there, so most wholesalers are really working to sell the growers' flowers. They have a roll call at each session so there is no way for them to play hockey. They are also trying to help solve the problems of the retailers. The retailer must have help; he can't get all of the ideas. A grower can't just put something in the ground and ship it to a wholesaler, and say, "Well, here it is fellows; buy it." We have to know. We have to plan in advance. Before you put a plant in the ground you have to know what you are going to do with it when it's ready for sale. You should have some kind of plan with respect to who is going to handle it, where he is going to sell it, and for how much. That advice is being given to growers all over this country. It has been said that when a group of retailers get together they sit around and growl at the wholesaler. The wholesaler in turn says that the retailer is a poor businessman. At times, of course, the retailer and the grower would like to get rid of the wholesaler, because he can't give us the merchandise when we want it and then when he has it he charges us too much, while the grower thinks he never gets enough for it. So the poor wholesaler is really right in the middle.

But these things are being worked out continuously and you can't get anywhere unless you have industry cooperation first. We are not going to get very

far if we do a public relations job on the outside without knowing what we are going to do on the inside. Your industry is only five years old and you already have a Clinic. You are way ahead of a lot of other floral groups in the other parts of the United States. So I say this to you, if you will cooperate and if you are helped by only one idea, regardless of what it is, it's been worth your two days here.

YOUR I want to tell you who your customers are in the florist business.
CUSTOMERS There are 65 percent, or 20,000 of the country's florists, doing a gross volume of \$10,000 to \$30,000 a year. There are 16 percent doing from \$30,000 to \$50,000. There are 12 percent doing from \$50,000 to \$100,000. Another 6 percent do from \$100,000 to \$300,000 and only 1 percent do more than \$300,000 a year. Those are the people you will be selling flowers to on the Mainland. Sixty (60) percent of these are small chaps, and funeral work is 60 percent of their business. It still leaves a lot of room to sell ideas. In our shop we would like to be free to sell flowers other than for funeral work just for the security it would give us. We do not like to sit around and wait for someone to pass away to sell flowers. This afternoon I will show you that we don't.

VANDA Whoever developed the idea to sell one vanda for promotion had a
PROMOTIONS good idea because I have heard a lot of people say, "It's the first orchid I ever had," and that was a thought. It got people into florists' shops. It brought vandas into big business. Big business is looking it over everyday and it's good business. You men have a few problems in getting the vandas to us and you have heard some of them. Originally, I would have suggested giving away only one vanda in that promotion scheme but when I saw those fields of vandas I would have upped the number to six--not one. It would have cost the buyer a whole lot more to give them six. Maybe these men who handle this promotion work are selling more than one vanda per person for a promotion.

I don't mind telling you that a lot of disappointments go along with those promotions. Many recipients feel that the vanda is not the orchid that they thought they were going to get, unless it is called a vanda. Generally, they talk about giving away an orchid in the advertising. It is misleading because the only orchids that the people on the Mainland know about are the cattleyas. While it has done a whole lot of good, it has been dropped by many retail florists. We used, perhaps some 500 or 600 vandas in our shop to decorate a window--but I learned that a drug store just 150 feet away was giving them away. Out came the window and vandas have never been in the main store again. We have four shops and one of our stores is now selling vandas again. I do think you could get back some of that prestige with the retail florist if you will try to make flower arrangements out of vandas. Ship them on the stem and then try to get out some ideas for their use. Florists generally don't have ideas, some do; some are creative, but when you get down to the florist with a \$10,000, \$15,000 or \$20,000 volume of business, he needs a lot of help. You might suggest three or four or half a dozen sprays of vandas in bud vase containers, or placed in little flat bowls for sale as table decorations or for hospital use.

CROTON You have been selling croton leaves in little packages. We can use one,
IDEAS two, and maybe three leaves which cost us in the neighborhood of 3 to 5 cents each. I would be happy to know that we could buy branches of croton leaves. I feel that these croton stems could be arranged beautifully in all-leaf arrangements. I can see croton leaves being used as a table decoration

along with some eggplant and many other kinds of fruits. I can see branches of croton leaves on a piano, on a mantle piece, and I don't mean just making one stick out this way, (demonstrating) maybe a tall one and two or three short ones over here. Maybe a figurine in there (I sell figurines). (Laughter) I can see many uses for croton branches other than just taking off the leaves because you have them. I venture to say that if you sold the idea of croton leaves on branches you would not begin to grow enough of them. Now don't run home and put in croton leaves because of these ideas. (Laughter) The ideas must be sold. We florists are willing to get ideas and we are willing to use them, but we've got to make money at it.

TI LEAF IDEAS We are using about 20,000 ti leaves a month in our shop and I will tell you where these 20,000 ti leaves are going. Instead of using the bracken (Oregon) ferns from the Northwest we back our sprays with ti leaves just to have something a little different and so that the back of a spray looks like a finished job. A customer doesn't like to see a lot of stems and greens and dried ferns. That is why we cover the entire back of this spray, if I can give you an idea with my hands. (Laughter) We use ti leaves in place of maidenhair fern in bowls. We use ti leaves in wreaths in place of ribbon. We make our funeral work very solid so that a wreath looks almost like a rubber tire. If we use gardenias, one touches the other completely around the wreath. On one side we use a cluster of ti leaves and put anthuriums with them, or orchids, or roses, or whatever the color combination is that we are seeking.

If those ti leaves were a little cheaper, we would use more of them as fillers in containers; but I can't afford to do it at \$22.50 a thousand leaves. We now use bracken ferns. We can afford, however, to take two ti leaves and cover the inside of a clear glass vase so that you don't see the stems of a lot of fern that we don't want you to see. We used to put maidenhair fern around those unsightly stems. The colored ti leaves could be handled the same as the crotons. I think that you could do a beautiful job. I can imagine them at big department stores in the windows, or on the ledges. I can imagine them in hotel lobbies--in homes--anywhere. They're beautiful. Personally, I would much prefer to have the top of some of those beautiful colored ti leaves and crotons as I would of a large bouquet of some fresh flowers that I know. It would be very refreshing. There's quite a fad throughout the country for dried leaves, dried foliages, seed pods. We sell a lot of them. This is what happened to me last year. We had a national convention in San Francisco and some wise wholesaler asked me where I got all of that. I told them, and this year I can't buy any. (Laughter) Be careful of that. If you've got something don't tell anybody else. (Laughter) That wasn't Sykora or Haley.

HAWAIIAN ARRANGEMENTS Since I have been here I have picked up several ideas for Hawaiian arrangements. I have received several groups of flowers as gifts and I have analyzed each one of them very carefully. I have one in mind that was sent to me--a hat with a container inside with an arrangement of a heliconia, stems of the banana plant, and ginger; it was beautiful. We pay a lot of money to men who could do no better. It was very lovely. We had other simpler arrangements of just all ginger with ti leaves. You might say, "Well, don't you know that you can get these hats?" No, I don't know. I have a lot of other things to think about. We take the easy way out.

Someone else has to be doing some of the thinking. You can't leave all this thinking to the florist. Most florists are one- and two-man shops, and they are busy all the time just taking care of their work. Someone has to show them how they can make more money with the product, and that is not entirely up

to the wholesaler. It is part of his job--he must help sell this merchandise--but the grower must help too; he must contribute. Just because he puts something in the ground it isn't all going to come back. He has to protect his investment by knowing that the merchandise is going to be handled the right way and that someone is creative. As you go along--I don't mean next week, month, or year--find people who have imagination on using these flowers. Don't just be thinking of shipping them out. There are a lot of people here who have imagination and can make beautiful flower arrangements. Get those people out front where their work can be seen.

A RETAILER'S PROBLEMS Very often growers become concerned because to them it appears that we ask or get too much money for flowers so they decide to go direct to the consumer. But they forget the waste and salvage value we must consider. For instance, if I buy a dozen heliconias for \$6 I must receive \$15 for them, unless I have them sold already. But when I buy heliconias I must buy four or five dozen to make the showing I want. If I lose one dozen, it eats into my \$15 worth of heliconias, and the cost becomes \$10 a dozen. A florist's markup is supposed to reach for three to one. He very rarely gets three to one if he is doing a volume business because of the waste and salvage involved. If roses are marked \$10 today they certainly are not worth \$10 tomorrow. Tomorrow those flowers must be used in funeral work or a decoration and rightly so, not because they are old flowers, but because they are better. You could not send a spray of tight buds to a funeral. It wouldn't look like anything; the flowers should be opened. You must use good judgment, however, so that they are not too open or discolored. The waste we must figure on is seldom taken into consideration by growers or wholesalers. They think that we are getting it all. You have never seen a florist make a million out of flowers. He has to buy a piece of real estate or play Bill Rodman's races at Hollywood. (Laughter)

Should you sell sprays of vandas and if we could get them at a reasonable fair price, we would have two chances to get rid of the flowers. We can try to sell them for two or three days as a bowl arrangement for five or six dollars or more. If we don't sell them that way we can put them into funeral work. They will still be good for that and still give satisfaction. I am not talking about using dead flowers in funeral work but I'm talking about using good judgment at the right time. I am also thinking of how you are going to sell these flowers on more than one idea. You won't sell enough vandas in vases if the florist hasn't another outlet for them. He is only going to be interested in your vandas if he makes dollars and he has no other reason to be interested in them.

With the figures that I have read you know that there are plenty of flowers on the Mainland. If there was never another Hawaiian flower shipped in there would still be gluts. But, we want them because they are different. We want them because there are more people with one dollar and two dollars than there are with five.

I was telling a story outside a little while ago about the wood roses. We sell a lot of roses to tourists from our two hotel shops. Whenever a tour comes into San Francisco we have all the girls in the different hotel concessions wearing wood roses and the tourists want to know where they get them. That's the bait. (Laughter) I buy wood roses, normally, at a cost of \$2 a dozen. If I buy a hundred dozen, and our regular supplier doesn't know it, I can buy them for \$1.50. A young man just starting in the exporting of Hawaiian

flowers offered me wood roses at \$1.25. So, I bought a hundred dozen. Just two days before I left for Honolulu I took a man to lunch from Boston who has a flower shop and he asked me how much I paid for wood roses. I said that the price is \$2, and I sometimes get them for \$1.50, but I did buy some for \$1.25 a dozen. "Why," he says, "I just bought some for 48¢." He was from Boston and I'm from San Francisco. No good. No one wants you to sell flowers without a profit, but you are going to take yourselves out of the flower business very fast until you get going on price and grade. If that happens very much more I am not going to handle wood roses. I can find something else to give those girls if I have to.

In San Francisco we have flower stands on street corners and we have lots of them. I stand up and defend them, because I think they are the best ad that the retail florists have in San Francisco. I was almost thrown out of a meeting one day for defending them. I went to the City Hall and defended them. I do not want them to have the same flowers I have and, if those hybrid vandas get into those flower stands, it is not going to be too good. I assure you that the flower stands do not get the big fine cymbidiums. They do have vandas. They do have cattleyas. There has not a day gone by in the last six months but what I could have bought from 200 up to 500 cattleyas nearly at my own price. There are just too many for me to handle. The growers have got to do something with those cattleyas. If I were a grower I would sell them, but there is still not enough top-notch merchandise. We pay \$2.50 and \$3.00 for good cattleyas right now, even though there are hundreds of cattleyas in the markets. We need to have good merchandise because that is the kind of merchandise we are selling. There is room for good flowers and there is room for lesser grades but we want to know that we are being protected.

CONCLUSION I feel that I cannot lay too much stress in this Clinic on your responsibility for promotions and the education of the retail florists and the consumers. I cannot help but feel that from the retail angle, if you create ideas, you create sales. That is all I have to offer.

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MARKETING SESSION PANEL

Moderator: Richard Tongg, Shipper and Landscape Gardener.

Members: O. Ben Haley; W. C. Kruegar, Manager, Flowers of Hawaii, Ltd.; R. Crossley, Partner, Crossley Associates; J. Sykora; E. Goeppner; C. Sakaguchi, President, Florists and Flower Growers Association of Hawaii; E. Rada; and Mrs. K. Ushijima, President, Hilo Florists and Shippers Association.

Tongg: Marketing is very essential to us because we have to eat three times a day. There are many problems that have arisen here because of unethical or cut-throat practices and our problem is whether we can iron them out here as they are being ironed out on the Mainland. If we follow some plan, such as the Denver plan, I'm sure that we will find a solution to many of our marketing problems. Please confine your questions to marketing problems.

Q: Is publicity related to marketing? Why has there been unfavorable publicity from Hilo about the overproduction of the vanda? (Laughter.)

Sakaguchi: Did you say that the publicity is from Hilo?

Comments of Questioner: Yes, although the story was published in the Star-Bulletin. Friends come up to me and say, "If they are throwing away flowers in Hilo, why can't we get them for practically nothing here?"

Peacock: I think that the point was well made by Mr. Goeppner previously. If we ship those excess flowers all over, we merely multiply our problem a hundred-fold or more. We continue to devalue the flower. I don't know whether I am right or wrong on that but I believe Mr. Goeppner could tell you what would happen, if we shipped all of those flowers to him.

Goeppner: There has been no preparation made here to handle that many flowers. Had there been a well-laid plan, the florists could possibly have handled as many as you could grow. After all, you have a big cost in just picking those flowers. You certainly won't complain about rain in Hilo because you have plenty--that's no cost. If you put those things in boxes and send them to the Mainland, you sustain large losses in addition to the cost of air transportation. You simply have to work out a plan in which you don't kill your own market. I don't know what the lady is driving at in connection with her publicity remark, so I cannot answer her question. Is it your feeling that you have been getting adverse criticism here in Honolulu?

Comments of Questioner: Yes, here in Honolulu. The stories we have heard are that they have been dumping the flowers and using them as fertilizer. Personally, I think that is very bad publicity for the orchid people, and bad publicity to make it known that the vandas are used as fertilizer.

Goeppner: No, it certainly is not good.

Sykora: Mr. Chairman, I think you must recognize that one of the problems in the flower business, as in any business, is to try to prevent that kind of adverse publicity. That publicity undoubtedly did not start with the growers of flowers in Hilo, but with somebody who knew a reporter, or a reporter himself, saw flowers being dumped. He knows that is news. We have to fight that kind of publicity all the time. For example, on the Mainland a reporter may talk to a grower of Easter lilies just before Easter. That small grower is likely to say, "Of course, I would sell all of my flowers at 25 cents a bud, but those big fellows have set the price at 35 cents." If that kind of publicity gets into the newspapers, it hurts every florist in the business--retailer, wholesaler and grower. I think that is what has happened here. We have that happening on the Mainland all the time but we do not blame our people unless they are carelessly saying things in the wrong places. You must be careful and police your own back yard to prevent that kind of publicity.

Rada: I would like to make a remark along that same line. Perhaps you will recall a picture appearing in a well-circulated national magazine last fall showing the use of vandas as a mulch around macadamia nut trees. There was considerable adverse publicity connected with that picture. It got out of Honolulu because it was novel--something new--but at the same time we were trying to sell vandas as exotic flowers to the readers of that magazine.

Warne: Let's try to keep our vanda problems to ourselves. If we have too many and have to dump some in the ocean without anyone seeing us, let's not talk about it. (Laughter.) It may be glamorous to dump vandas into a swimming pool, but it is hurting our industry.

Tongg: Our best solution is for every grower to police himself.

Sykora: That's right.

Q: Is there any advantage in sending vandas in sprays or sending them as individual flowers? I'm referring to strap-leaf vandas.

Sykora: I think that it is an advantage to send them as sprays. I feel that we have a much better opportunity to sell the sprays. If the florist wishes to use them in an individual piece, he can take the orchids off as he needs them. There are many times, however, when you can do things with a spray that you cannot even think about if the flowers come picked off.

Q: You shouldn't forget that the first flower will be so much older than the last flower. Will that make a difference?

Sykora: I appreciate that. What we often do is to ask our growers to pick off the first few flowers that come on. Then, let the others come along and cut the spray as the last ones appear in the bud stage. Thereby, you are losing nothing but have a much wider usage for your flowers, and you have some singles and some sprays.

Rada: I would like to follow this line of discussion a little further, and ask Mr. Goepfner a question. If we did ship them over in sprays, would we not have to accept a lower price per flower?

Goeppner: I think you should. You should not worry about the price; let the demand for the flower determine the price. As I see it, the idea is to get the flowers there and to let someone else share in the joy of them through displays and ideas. Now, they are just withering away on the plant with no selling ideas behind them. It certainly is not going to cost a lot more to cut a spray than an individual flower. Price is not the important thing; you should think in terms of arrangements and getting the flower before the public.

Q: Mr. Sykora, isn't it true that there is an advantage in marketing the vanda both as an individual flower and as a spray? For instance, your cymbidium growers found that the market for sprays was relatively limited. As soon as they started packing them as individual blossoms they widened their market tremendously. Wouldn't it be to our advantage in an over-all plan, bearing in mind quality and grades, to market them both as individual flowers and as sprays?

Sykora: I would say definitely yes, especially if you can tie it to improved quality and finer flowers. I don't think there is any question but that you would want to market them both ways. Since you mentioned cymbidiums, I might mention that a particular value to those growers in marketing them in two's and three's is the fact that they can sell particular cymbidium colors. A customer can buy two of one kind or three of another when desired. On the other hand, we would hate to see all of our cymbidiums sold as individual flowers.

Goeppner: For practical purposes, we must recognize that small retailers cannot afford to buy sprays of cymbidiums. If they can buy a package of one or two, that gives them a chance to sell cymbidiums, but good quality never gets into those packages.

Q: I would like to continue this discussion by asking Mr. Krueger and Mr. Crossley what problems they have had in shipping orchids in spray form?

Krueger: We have shipped some of the vanda hybrid sprays to the Mainland but our biggest problem is to get the entire spray over there in salable condition. We still have a lot to learn on packaging the sprays.

Crossley: I can't add much to that--packaging is the big problem as far as handling sprays is concerned.

Q: If the vanda orchid is graded, according to standards such as have been developed in Denver, what would be the price that we could expect for the different grades?

Sykora: That is a question that positively no one can answer. We hear that question in the states all of the time relative to mainland flowers. There are so many factors entering into the supply and demand situation that the price would be bound to fluctuate. There is no possibility for set prices, such as they talk about in Denver, because that is a closed market. All of the Denver wholesale houses grade according to the same standards and the carnation is not

subject to competition from outside carnations because they happen to be superior quality carnations. Here you don't have such a situation. You have a tremendous supply of vanda orchids. There will have to be very great pressure in selling in order to merchandise them at all. If you would send in only one-one hundred thousandth of those you produce, I could tell you what I could get for them, because I would set a price at which I could move them. But that wouldn't do any good. The minute you step up the supply, the price would drop. You couldn't ask your shippers to tell you what price the flowers will bring.

Q: We have heard that the florists refuse to sell vandas as long as they are being sold in the corner drugstores. Is that true?

Sykora: Mr. Goeppner is in the best position to tell you the reaction of the florists. Mr. Goeppner operates what I consider to be the finest flower shop in America.

Goeppner: We personally feel, and I think we all agree, that the vanda has a dual purpose. It has a purpose for promotion. We don't feel that we should say that you should not sell them through the drugstores, department stores and such places because they do a good promotional job without hurting the retailer. When we see the great quantity of them, we are trying to create another market for them and to get them back in the retail shops by cutting the vanda in a different way. We would be impressing the recipient, if we gave her a vase of orchids very well done. That would be something different again--it is more the idea than it is the flower. I wish to take it a little further. The vanda is in this position: A young chap goes into the store and would like to buy a corsage for his first date. He only has \$2 to spend. We could give him more vandas than anything else, but he doesn't want them because they are given away in a drugstore. I know that you would feel the same way--that the girl friend would not be very impressed if the same flowers were given away in a drugstore. You've got to make a good impression on these little dames the first time. (Laughter.)

Rada: I would like to switch the discussion of the vanda from the corsage angle to another aspect of the problem. I was told that if we could get the vanda to the retailer for three to five cents apiece, that there would be a tremendous outlet for them in funeral work, which is about 60 percent of the average retail florists' business. Is there a possibility of using the vanda in this outlet and what would the price have to be?

Goeppner: Right now you would be competing in the San Francisco market with gardenias. We can buy gardenias for two and three cents each. (Whistles.) Gardenias will cover a floral piece much faster than vandas. Taking labor into consideration, it would take us perhaps twice as long to make a wreath out of vandas as it would out of gardenias. In that case, the price of vandas goes down.

Q: In other words, the price of vandas has to be below the price of gardenias?

Goeppner:

At this particular time, if you can get vandas there when other flowers are short, the vanda price could be ten cents because of supply and demand. Flowers must be moved and moved right now. If we could put flowers on the shelf and count them as inventory, and continue to sell them at 3 to 1, we wouldn't have any problem except that everybody would be in the florists' business. In some of our mark-ups we have to get 6 or 7 to 1, and some of them are as low as 2 to 1. If we can average 2 to 1, we can make money. Other merchants work on either 60-40 or 50-50.

You speak of the present vanda prices at three to four cents. It's hard for us to think of those prices when vandas are being sold here by the pound. If we could send sprays of vandas into the mainland market at about \$1 a dozen, it would be good competition for the gardenia. Isn't it asking too much of the mainland market to sell them for three to four cents there?

Goeppner:

I have tried some of the spray vandas and have paid 20 to 25 cents a spray, plus the freight. We took a half dozen sprays and put them in a very nice container and sold it perhaps for \$7 to \$8. Many of the flowers spoiled and some didn't sell so I may have only come out even. Even if I just did that, at least I presented something different. If all flower shops in San Francisco have vandas and they all arrange them the same way, then I'm going to look toward the hybrids. When I get the hybrids, and everyone else has them, I'm going to look for something else. Buy by all means you must grade your flowers and market them through as many people as you can.

Sakaguchi:

I'd like to ask the Hilo vanda growers this question. Why is it that Hilo vandas are flooding the Honolulu market at 50 cents a pound?

Rada:

In my talk this morning I referred to the moans and groans coming from the market place. This is a sample of it. I'd like to follow that up a little further. I mentioned the need for a wholesale market in Honolulu. Mr. Sykora, and others on the panel, what effect would a wholesale market have in stabilizing local prices?

Sykora:

It is a difficult question to answer because I might be treading on the toes of people who have invested their money in the industry. I will try, therefore, to make my answer quite general. I believe that the wholesaling of flowers is an orderly way to market flowers. Orderly marketing is what is needed above all else. When Mr. Sakaguchi asked that question, I felt right at home. You can find that type of question asked anywhere at a florists' convention. For instance, the competition between Denver and Chicago carnations presents somewhat the same problems. But they can take it with the same laugh that you did. If you can laugh about it, and yet be concerned about it as a problem to be solved, you'll find an answer. Specifically, however, wholesaling is orderly marketing, and there will have to be more orderly marketing if you wish to avoid that competitive dumpage because your markets are so close together. I think you are working in that direction. You must remember that you are only a few years old and still in swaddling clothes. I believe you are on the threshold of that kind of a partial answer to your problem. Above all else you must have closer contacts with

each other. Your florist association must become stronger and more of the growers on the outside must cooperate with those of you cooperating on this Clinic.

Crossley:

It seems to me that one part of that problem has not been fully answered and that is the relationship between the retailer and the wholesaler. There is no market in the United States I can think of, in which at least some retailers bypass the wholesalers as often as they can. (Laughter.) You can't have a well regulated wholesale market as long as there are a number of important retailers constantly fighting it. I'm sure that every shipper and every grower is constantly being approached by florists directly. So, when you say "Will a wholesale market solve the problem here in Honolulu?" my answer would be, as it stands right now, no. There would still be a number of retailers of flowers who would go right to the growers, who are growers themselves, or who have grower connections. Not until the relationship of the retailer and the wholesaler is accepted as the proper channel for marketing flowers do I think the problem will be solved.

Haley:

I didn't want to say anything to you about this until this afternoon, but I don't want any of you to think that Denver is a controlled market. We are very competitive in Denver even within the confines of our city limits. When our competitors change their prices, we are the last one's to find out about it. I can tell you that when we changed our prices this last time, we told everyone else about it first and then our competitors. Ours is not a controlled market for the control of prices. Ours is a market where we have limited production and where the chance to expand production is limited. We can estimate quite closely for the next year what our production is going to be, even by months. These figures make it possible for us to lay long-term sales plans before the product arrives.

Crossley:

I think it would be unfair to leave the impression that I think the problem of wholesaling is strictly between the retailer and the wholesaler. The grower plays an important part in it. If the grower is trying to by-pass anyone along the line, he contributes his fair share to the confusion and an unstable market. A grower might be very happy to send his flowers through channels when they are hard to sell, but when the demand increases, he may sell direct to get a few cents more. I think that in any association, such as the Denver organization, one of the important things is the working together of all three of those groups toward a stable market.

Sykora:

I think this is very important. You should understand that even in our own mainland markets we have a fair number of retailers and growers by-passing the wholesalers. We have very few areas in which the wholesalers handle the entire output of the area. I don't want you to think that there are any specific panaceas for your marketing ills. I said that wholesaling is orderly marketing because the product travels from the grower to the wholesaler and to the retailer. You can't expect to have, here or anywhere else, a system of marketing whereby all of the flowers are channeled through the wholesaler. I also wish to point out that the Federal Government has what is called an anti-trust law, as we have found out in

Chicago, and I think you must be very careful in differentiating between what is an agreement and what is individual choice and action. Voluntary cooperation through your association is the only way I can think of achieving a more orderly handling of your products.

Q: Mention has been made of shipping croton branches. In my experience, I found that croton branches will not hold up. I wish to ask Mr. Krueger or Mr. Crossley what experiences they have had along this line?

Crossley: Our experience also has been that branches have not shipped as well as the individual leaves. We haven't found any way as yet of keeping them. Mr. Sykora says that he has the answer.

Sykora: One of the biggest complaints I heard for a number of years was that there was no way of making the flowers last longer in the home. There were all kinds of treatments and devices developed to increase the keeping quality of flowers. Finally, science found a way that flowers can be made to stand up even in very hot temperatures. How? Simply by understanding the metabolism of the plant itself. If that is true, I'm sure that you can find a way to make these crotons stand up in shipping. You might not find the answer immediately, but you will find an answer--perhaps Floralife will do the trick; perhaps preconditioning them for a few hours is all that is needed.

Goeppner: I would like to ask Mr. Sutton if it happens to all crotons?

Sutton: I don't know whether it is the variety or the growing conditions. I have found some of the small leaf varieties that do hold up quite well.

Goeppner: It was my thought that if the crotons were cut from 15 to 30 inches long and the stem was not too hard that it would absorb the water. Some research on it might prove that some varieties can be shipped while others are not as well adaptable to shipping. We do get some that keep.

Sutton: If Mr. Sykora has anything that would do the trick, I would like to give it a thorough test and make the information known to anyone.

Sykora: There's another product that we (Laughter).

Goeppner: Seems to be a lot of competition between Floralife and the luau tickets.

Sykora: This is important; this is not a joke. Some of you may have heard of Snopak. It takes up a great deal of water when it is compressed. Some flowers put in moist Snopak have been found to last for four or five days in a hot office. It is entirely possible that Snopak might be the answer. It is something you should experiment with.

Q: Mrs. Ushijima, you have sold more of these vanda hybrids than anybody else. What colors do you find sell the best? What colors

should we grow? Are the mainland people buying them or just the local people?

Ushijima: We are able to sell more blue; however, we use them in vases, funeral work, hospital bouquets and we can sell all the colors. The mainland tourists, I believe, are attracted to the blues and next in preference are the light browns.

Q: What is the market for dendrobiums in the states? They are plentiful here.

Sykora: They are not too readily marketable. We have dendrobiums grown by many of our orchid fanciers in the states. I would say that there is not a steady market for dendrobiums, but we do sell quite a few in the course of a year.

Goeppner: Dendrobiums have not come back to their own; they are overshadowed by some of the other orchids. If there were enough coming in, there would be a sale for them, particularly the yellow and white ones. The little lavender one is not very popular.

Tongg: After listening to the discussion here this morning and the comments on the splendid cooperation in the Denver market, it appears that if the local growers and shippers, especially of vandas, joined together to form a strong organization, ethical marketing practices can be established which will mean increased returns for both the growers and the shippers.

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SPECIAL FEATURE

The Reverend Hakuai Oda, one of Hawaii's foremost artists in the Ikenobo school of flower arranging, displayed several examples of the art during the marketing session, with commentary by Mrs. Takeo Kishida. He made an arrangement of water lilies and rushes, with Mrs. Kishida explaining the reasons for placement and size of each element in the composition.

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MARKETING SESSION
(Part Two)

WHY I MUST SELL MORE FLOWERS

Edward Goeppner

PODESTA-BALDOCCHI In this talk I want you to know that I wish to speak very humbly about our business, Podesta-Baldocchi, retail florists. Many people have been interested in Podesta and Baldocchi; the firm is eighty years old. The men at the head of Podesta and Baldocchi have grown up with it. Those who grew up in this business are two senior partners and two junior partners, and now Podesta's son and my son. We have been together an average of more than forty years. Each one of us has special work to take care of. Since I represent the junior interest, I am the managing partner. We have 14 people in our organization who have 25 years of service or more. We have 16 people who have put in 10 years or more. We have between 90 and 100 people on our payroll right now. We are very close to our personnel; we do everything we can for them. We have an interest in them and we try to know that they are going to be happy in their work. I happened to hear young Henry Ford refer in a speech to a letter to one of his dealers. Young Ford wrote, "How wonderful it is; I made you a success." His dealer wrote back, "I made you and did a better job." (Laughter.) The holiday time, Christmas, is our biggest time of the year; last Christmas we had 267 employees and farmed out deliveries to 20 trucks and drivers. At Easter time our business is the next biggest, and we had 140 people on the pay roll this last Easter holiday. When I say that I must sell more flowers, the reason is that, with the kind of business we are operating, our expenses are considerable. I'm going to tell you what a few of them are. Our pay roll last year was \$281,000; our advertising was more than \$40,000. Any month that we don't take in at least \$60,000 we go in the red. That's why my hair is gray.

REMINISCING I started with Podesta-Baldocchi in 1912, as just a little boy. I started by scrubbing the floor and drove a horse and wagon. Some of the things that we talked about today have brought memories of the flower business then. I can remember, as a boy, that people never had any confidence in the florist. One day a Chinese man came into our shop to buy an azalea plant. He was afraid that he wasn't going to get that plant, so he marked Chinese letters on the pot. They gave him the pot but switched the plant. (Laughter.) I can also remember a man who had no confidence in us and stayed in the shop until they put the roses he had selected into the box. He was afraid he wasn't going to get what he had paid for. He insisted that they send me out to deliver the package while he was there. The boss sent me out with the package but told me to go around the corner. When I returned, they changed the roses. Those are some of the things that happened then, but I can assure you that we've come a long way from that.

SALES AND PLANNING Last year our sales were \$1,200,000. We now do in a normal day as much business as we did in the month of July, 1913. I made a traffic count of people coming into our store on three Saturdays of December last year. I told the boy at the door that I wanted an honest count, so I asked him not to include employees. On the first Saturday, a rainy Saturday, 2,900 people came through our store. On the following Saturday there were 8,887 and the following Saturday, 7,000. We are able to get free publicity on the radio and television at the holiday times, and we make the news because people talk about our shop. The planning for Christmas takes fully eight and ten months work in advance. We have bought most of the background that we are going to have

this year; that background was bought in March. The point is that we have to plan; we know that if we intend to do the amount of business, which we must do, in the month of December, we have to work months in advance. Our business for last December was \$193,000.

PUBLIC RELATIONS
AND ADVERTISING

In our business we are working continuously to do a better job. We try to find perfection but we don't want to know that we have found it, because if we find perfection, we are slipping. In addition to the help in the store, we have a New York advertising agency that helps us with our advertising. We retain a public relations firm on a yearly basis, separate from the advertising agency, because if the advertising agency tries to sell me a bill of good maybe the public relations office will catch it. If I get overambitious, they both knock me out. If public relations comes up with something, we have two checks against them. I do not believe that there is another flower store in the country that handles public relations on a retaining basis. We retain the firm because we run tests on ourselves. We are not always sure that the many people who come into our shop have been treated courteously, that they got the flowers they wanted or that they were satisfied. Sometime during the month we take a certain number of names at random and have them called by the public relations firm. We want that done outside of the shop so that we don't bias the reports. The people are asked if the flowers arrived in good shape, if they arrived in time, if they received what they wanted, and if they were treated courteously. Sometimes the reports we get are not good. There's only one nice thing about big business. You can cover mistakes much easier than you can in a small business. That's the only satisfaction I get; when I make a mistake, I know that it won't be noticed too easily.

TYPE OF
BUSINESS

I think you would be interested to know how we do some of this business. We had five decorations for debutantes between Christmas and New Years this year. In one decoration alone we used 7,000 of one variety of camellias plus all other flowers. We went so far in this decorating scheme that we took down the drapes in the club house and put in new ones. We carry \$150,000 worth of decorating equipment. We can supply anything--chairs, table cloths, altars, platforms, candelabras or any kind of a stand that you can hope for--and we still never have enough. It is necessary to accumulate these things over a period of time. In these debutante party decorations each one had to be entirely different because the same people were invited to all of them. It took much planning. We now know that we have two such parties for the coming season. As soon as I get back, we are going to make plans for decorating the hall where the treaty between Japan and the United Nations is to be signed. We will move big trees, perhaps 15 or 25 feet tall, into containers that will be maybe five by five feet and stand another five feet high. We are called upon at times to decorate for many, many celebrities that come to San Francisco. And for each celebrity decoration, we also do a little wedding for \$25 or \$35 very readily, because we know that there are more people with \$25 than there are with \$100. In our store we always have something for two dollars because office and shop girls also have good taste. We like to sell things in good taste. We're not interested in just selling something for 98 cents or \$1.69. There's room for it; the cash and carry business is fine.

MANAGEMENT

In our overall picture we can afford to absorb a delivery cost. We don't like to be in a place where we say "No" to anyone. We do say "No" definitely on time credit. We must have a system and regulations. Our deliveries leave at a certain time. We do not promise a delivery for eleven o'clock if we know it's going to be there at twelve. Those are things that we

have tried hard to overcome and it is sometimes necessary that we say "No." It is too easy to say "No," however, but it is very important when you have a large staff to have rules. We feel that these rules must be lived up to; we must have certain discipline. We feel too that there is an exception to every rule. We have people in charge of departments. Credit is a big item in our business. We must have a delivery manager. We must have a man in charge of sales and a man in charge of production.

I started buying flowers for Podesta-Baldocchi when I was 21 years old and I'm still buying them. My son goes with me; he has for seven years. We feel that buying and selling are the most important aspects of our business. We take advantage of markets on the basis not of beating down the grower but of helping him. I don't want to stand up here like I'm the fair-haired boy, that we're always helping someone else, but our system of buying is such as this. We have standing orders for good merchandise. Our flowers are selected for us either in the fields or as soon as they arrive on the market. Those standing orders remain the same year in and year out. We may raise them or lower them, but should I go into the market tomorrow morning and buy a hundred bunches of roses for a dollar a bunch, that would have no bearing on my standing order for tomorrow of the same roses at three dollars a bunch. It would be foolish for a grower to sell me roses for a dollar if he knew that I was going to cut him off the next day. That \$1 deal is as of right now.

To get our business, however, a grower must have quality flowers. We are not interested in anything that is not good. We work with big growers because we have to support them and they have to support us when we need their merchandise. Sometimes we buy 10 or 15 thousand daffodils. I remember buying many more than that. When we buy these daffodils we get on the phone immediately. We call stores and tell them that we can give them daffodils, say for a dollar a hundred, but if they come into the store, the price is a dollar and a half a dozen. We want to sell the flowers. We do as much of that as we possibly can for a very small profit. We may sell a department store 2, 3, or 500 dozen flowers on a 2 to 1 basis. We take care of them. We are not afraid to tell them what they cost us and we are not afraid to tell them what we will sell them for, because we are entitled to some profit. The labor that goes into the price is explained to them. If you are running the kind of business in which you don't want to charge a premium but do want to make a profit, you don't have to worry about telling people that you are entitled to that profit. I always refer to these things with the saying, "You get what you give." You can fill a glass with water, but unless you pour some out you can't get more in; so I think it is in life. I can't help feeling that our success has been dependent on people growing flowers for us. If they didn't grow them, I would have to be in another business. We have to understand the problems of the men who grow flowers. I feel that we do understand them and they know our problems. We don't have to go through the back door, but, of course, some of those folks get pretty cagey at times. (Laughter.)

We handle flowers very carefully. I become more upset seeing someone handling flowers carelessly than if someone drops the most expensive thing we have in the store. I have no feeling against dropping an ordinary container because that is insured, but I suffer a physical hurt when I see flowers being mistreated. I say that very sincerely; I can't take it.

I always say that florists are understaffed if they have wilted flowers in their store. If you haven't had time, you are losing money--you are losing business. A fellow who can make a spray just twice as fast as somebody else,

is probably limited in what he can do. Somebody has to think. It is very important to think. To the retailers who are here, the best thing I can say is just spend one day with your door locked or go out in the hills and just meditate on how you can do a better job. But the fellow who is too busy answering the phone, keeping his books, making window displays, and taking care of his orders does not have time to think, which is something that you must do. Each day we ought to ask ourselves, are we adding something to our business or are taking something away from it?

IDEAS We try to sell ideas for every kind of occasion there is. We try to get bankers and big business houses to use flowers. We run ads in the Wall Street Journal telling the readers to use flowers and what good business-getters they are. We are able to sell flowers on that basis. We get flowers into places where businessmen find it difficult to get them in any other way--and flowers are accepted. As you present your lei so graciously and beautifully, so men have flowers at their dinners and stag lunches.

We have flowers at nearly every civic event that takes place. I sent a couple of young fellows to an industrial show and I said, "You tell them that their machinery may be up to the last minute but it looks like nothing without flowers." They came back with \$700 worth of orders. We had never attempted that before. We have market weeks twice a year, and we serve several hundred people there. Those flowers that they buy at these two particular times of the year amount to about \$4,000 to \$5,000 each time.

Last year we sold big ideas for little money--four dozen roses beautifully packaged in a bowl for \$5. We made it easy for people to ask what was the feature for the day. We call them features, not specials, because if you call an item a special, it makes it look as if everything else is expensive. We made it easy to say, "We want you to get your feature today." We found that one lady had bought 17 bowls in 6 weeks; I phoned her and asked why. She said, "Because you made it so easy for me to say 'No, thank you,' or 'I had a wonderful time.'" It was the most gracious thing that I have been able to buy from Podestas in many years."

We try to sell our flowers for a profit, but not a premium. I am reminded of our ideas with orchids. We were trying to sell three or four cymbidiums at a time. Very often ladies don't like to wear that many cymbidiums on their suits--so we sold them only one. We sold a whole lot of them by selling one. Each time that we have sold a bowl for \$5 we have always had one for sale at \$25, \$30, \$40 or \$50. We can't help but feel that there are more people with \$5 than there are with \$6 or than there are with \$50. Some have more money, so we reach out and grab that too. (Laughter.) You would be interested to know that in the promotion of the \$5 bowl, we sold 14,000 of them in one year. If we put 6 dozen carnations in a vase in the store, we would not sell more than 2 or 3 dozens during the day. When we make up 25, 30 or 40 bowls and advertise them with four dozen carnations, we sell them all. In one week we have sold as many as 2,000 dozen carnations in bowl arrangements, because it was an idea. And we still cannot sell 3 or 4 dozen out of a vase. That applies to everything that we do.

Our selling ideas have helped us until now we may appear very expensive when you look into our shop. We have a choice of either looking cheap or expensive, so we take the expensive look and break it down. We show people ideas. You can come into our store at anytime and you will find 50, 60, or 100 ideas to buy. We make corsages, put them on plastic background, and put a

price on them. "I'll take that," the customer says. We don't talk with our hands. They don't ask, "How much is the bowl of roses?" The price is right there. It gives confidence to the customer. That's a far cry from when they changed the pot. In those days they had a different price for every fellow that came in. We have not been doing that for many years. If the bowl is worth \$5, we shouldn't be afraid to say so. The florists didn't want to put the price on their merchandise many years ago because they thought that their competitor would find out their selling price for flowers. They didn't think of the customer. There isn't anything that we have in our shop that doesn't have a price on it. That is the price you pay, and that's the important thing. Sometimes you may find a cagey florist who will come up to you and ask what price you receive for certain roses. And you'll say, "Oh, \$5." And then he says, "Oh, I got \$6." If you checked up on him, you would find that he got only \$4 or perhaps \$5 on the average. So, why not put the price on? I lay a lot of stress on that because it's very important. One of the most important things a retailer can do is to let the people know what he has to sell and for how much. When the customer comes to you, he expects you to know what he wants. But in almost every case, the fellow has to know what he wants before he goes into the flower store. If he doesn't, he won't go in.

This year we are changing our slogan for our fall line. We're going to say, "So beautiful for so little." We have a series of ads that we are going to run between now and next spring.

STORE DECORATIONS We try to run our store in a dignified way. We change our windows twice daily. One is a daytime display and, of course, we cannot leave the elaborate display in overnight. We have new backgrounds in our store continuously. When the trees are blooming, we may have the store just filled with red blossoms. As you look down the store, it would be like looking through an orchard. Another time it might be almond, or pink peach, or it might be white. That is the background. We segregate all the colors. We are very particular. We watch every little thing, such as a chipped vase or dirty vase. We are looking for perfection. We keep the pinks, the blues, and the whites over to one side; the yellows and oranges on the other side. The rods are separate. We sometimes buy large quantities of a flower, if there is a surplus of a fine one, such as stephanotis; last week before I left, we had 7,000 flowers in one little window. It took about eight people to arrange that, but that is how we get the people into the store. We must have something to bring them in--a store full of flowers and no customers is bad. We have a continuous audience every day, and we must have something different there for them to see. If they thought they would see the same thing daily, they would not come back. But they do come and there are times when they buy something.

BIG DECORATIONS I would like to talk a little bit more on big decorations. Macy's of San Francisco, a firm that also has a New York store, pays us to put on a flower show in its store during Easter week. We move in no less than 35 to 50 truckloads of plants and blooms. It takes our entire staff and extra help to prepare that show over the weekend--the Saturday and Sunday before Easter--and it takes ten people to maintain it during Easter week. Mr. Bingham, who is the president of Macy's, said to me one day, "Ed, the money I give you that week is the best money I spend for any promotion we make," and they spend thousands and thousands of dollars in newspaper advertising. I said, "Bing, put it in writing." (Laughter.) And he did. I have shown that letter many, many times to our different wholesale groups. The show attracts more than 200,000 people in a week. They have sold more merchandise since they have had the show than at any time before. This year will be the seventh show. This

fall we are going to sacrifice the show to give it to Roses, Incorporated. The reason we're doing so is that we thought Macy's was entitled to the show rather than to have it go to another department store, since Macy's was the first department store to buy our flowers. We are going to work with other florists in this show because it is an industry program.

Two years ago we put on a show at Macy's that we called a "path of gold." There were some 25 or 30 columns to decorate. We took 100,000 African marigolds and pasted them on beaver board. I don't know how much glue we used, but there was so much ether in the glue that our people got tipsy making the columns. We had to put on that show for those people, tipsy or not, and we had to do it in two days. The beaver board cost over \$700, so don't think when you look at a decoration that all is profit. I'm sure that many florists who decorate don't know what their hidden costs are. We do. When we do decorate, we have to be very careful that we don't lose money. There are so many hidden costs that we must be very, very careful on estimating the costs of the job. They are big jobs. One job, a debutante party, cost \$15,000. There wasn't any one of the other four debutante jobs which cost less than \$2,000. But in those jobs we must pay for such things as artists' drawings that are scaled. We know just exactly what we're going to do when we go in there.

SUBTROPICAL PLANT STORE We have in process now a scheme for opening a store that has no flowers in it; we are going to sell plants and foliage plants. If you look in "Better Homes and Gardens" and "House Beautiful" and the other important home magazines on decorations, they all include plants in their pictures. Do you know how hard it is to buy a plant in a flower store right now? You can buy a dish garden but that same dish garden will be in every flower store. A few stores will have them in little brass containers but no thought has been given to a beautiful thing. It is just and rightfully so, since the average florist is so interested in getting rid of his perishable cut flowers that he does not take very much interest in just an ordinary plant arrangement. In the setup we have in mind, we are going to have from 150 to 200 ideas in containers and all will be planted with these subtropical plants. We feel that the plants will sell for many reasons. First, we will inform all the interior decorators that we are going to make it easier for them to include plants in their decorating themes. We are going to put a salesman on the outside to dream up better business opportunities or business-getters for the banks and big corporations by selling them a much better idea than the usual thing they have been buying. We have done considerable research on this. We find that people want it. We find that it is a brand new business. I think that in Hawaii you could sell a limited amount of very handsome things. I have looked in many of your stores without finding the things I have in mind, and I don't mean retail florists; I mean other stores. I can visualize big handsome square glass containers. I can see those crotons up here (demonstrating) and I can see some of your other plants here (demonstrating) blending with the landscape. You might say that you do not have the people who will buy them. Many of the imports that I buy from Los Angeles are shipped back there. (Laughter.) In addition to our flowers we sell about 10 or 15 different types of merchandise on exclusive contracts. We are the largest sellers of Royal Copenhagen on the Pacific Coast including any department store. These little figurines and ornaments range anywhere from \$1 up to \$1,250. We have never sold one at \$1,250--we broke it. (Laughter.) We have sold them for \$200 and \$300 and for \$400 and \$500. We now have a little canary, a mechanical bird in a cage. I wouldn't give it room in my house but we sell one a week at \$135. But I make mistakes too. About two years ago a man said to me, "I want you to try this figurine." I said, "No, I don't like it." "Well," he said, "I can see that in your window and the way you do things, it will be beautiful." I said, "I don't want it."

My wife was with me and said, "He sure is persistent and he knows what he wants." I said, "Yeah, he sure is persistent." He said, "If you don't take it, I'll send it to you on consignment." I said, "I never refuse anything on consignment." The figurine sold for \$90 and we have sold 12 of them in the last two years. That's the kind of mistakes I make.

CONCLUSION I have told you something about our business that has taken us over a long, long time. My wife has said that I love that store more than I love her, but that isn't so. (Laughter.) I do love it. My son talked to me about coming into our business and he wondered just how I felt. I could only say to him that if I had to do it all over again under the same circumstances, I would. It has been a great satisfaction to me to be with the store and I have always been very happy doing that kind of work. We people who are in the flower business and love it are perhaps a peculiar kind of people. You can get a lot of fun out of doing it. You don't do everything for dollars. You do some of these things because you feel that way. Flowers that are grown are meant for all people, not only people with dollars, but for all people. I can't serve them all. So, I'm trying to serve as many as I can, in good taste and at a fair profit. Thank you.

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THE CALIFORNIA INTERNATIONAL FLOWER SHOW

William Rodman

GREETINGS First, I want to bring you greetings from the Southern California Floral Association. I know the membership there would send you warm greetings. My mission here today is to tell you about the California International Flower Show.

We have had our second successful show. Our first was held in 1949. A disastrous fire at Hollywood Park, where the show is held, forced us to forfeit the 1950 show. In March of this year we held our second annual show, and each has proved very successful. Our first show attracted 121,000 paid admissions; the 1951 show, 164,000 paid admissions, including exhibitors and those holding passes. A total of 186,000 people attended for nine days and the gala preview which was sponsored by the Assistance League Ladies of Southern California. The preview is really an outstanding affair for the opening of our show.

INVITATION The reason I bring this show to your attention is that we would like to extend to you the invitation to have the feature exhibit, a Hawaiian Exhibit, at our 1952 show. The show in 1951 featured the Holland Bulb Growers Association Exhibit, with 50,000 tulips. The bulbs were brought in by boat and forced at Los Angeles. The 1952 show is planned for March 22 to March 30 with the gala preview again staged and sponsored by the Assistance League of Southern California. The money derived from the gala night goes to charity.

LOCATION The show is held at the Hollywood Park Race Track, Inglewood, California. We get the building, rent free, from the race track authorities. We have to do the entire staging of the show, which costs approximately \$180,000. It's all indoors. The entire side of the building that faces the race track is normally open, but we enclose it. Everything that pertains to the race track in the interior of the building, mutual windows and so forth, are all covered. It makes a beautiful exhibition hall. We cover the entire first floor and three-quarters of the second floor. The building is 1,215 feet long on the first floor, and the second floor is 800 feet long. We cover 5 acres, all indoors, and we

have parking for 18,000 cars. The people who attend stay for the entire day because we operate the restaurants and the dining room.

OPPORTUNITY I have attended all of your sessions here, and the interest shown is greatly to be admired. I feel that an exhibit in 1952 would be a splendid opportunity for you, as an association, and that the people of Southern California would welcome this exhibit. I am not speaking entirely for the florists; I am speaking for the people, the flower-buying people of Southern California. They would welcome a large exhibit from Hawaii. I have contacted the Hawaii Visitors Bureau here in Honolulu and have been told that if this group, your Association, will cooperate at the California International Flower Show, they would back it up 100 percent. I have talked to some of the carrier representatives and they feel the same way; they will wholeheartedly support your movement. We will make no charge whatsoever to you people for your exhibit. We will welcome it and will work with you and help you in every manner possible.

I have some photographs with me of the show; some are color transparencies. I will be glad to show them to any member of the Association. We publish a catalogue or program for the show and last year we sold over 60,000 programs. Every third person attending bought a program. We would feature the Hawaiian exhibit in this program and at least 60,000 people would carry home the message of your flowers beside having seen them at the flower show.

DISPOSITION You might ask, "Is this a profit making deal?" The California
OF FUNDS International Flower Show is not a corporation sponsored for profit. It is sponsored by the Southern California Horticultural Institute, a group of business people who are horticulturally minded. The co-sponsor is the Southern California Floral Association, which as you know is the organization supported by the members of the Los Angeles wholesale market. Any money that may accumulate from this show goes into a fund, and no individual gets the benefit of any of that money. The fund is built up to be used for the advancement of horticulture, such as scholarships at the California colleges, plus bringing horticulture information and ideas for the use of flowers to the general public. The only paid individuals are myself as general manager and those who actually put on the show. But the general chairman or any of the officers do not receive any compensation; they do it for the good of the cause. I want to thank you for this opportunity of addressing you; and having been associated in organizational work on the Mainland, I compliment you on your first clinic here. Thank you very, very much.

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ORGANIZATION IS THE KEY TO SUCCESSFUL SELLING

Irwin Rust

GROUP INTERESTS I want to talk particularly to those of you who are producers. Most people interested in flowers and foliage in Hawaii do produce to some extent, so this speech will include all of you with the exception of our mainland visitors.

There are three groups interested in the marketing of Hawaii's flowers and foliage. These groups are: producers, who do nothing but grow the flowers and foliage; handlers, who may also be producers; and the ultimate consumer, the boy who actually buys the corsage to pin on the girl he takes to the dance. Each of these groups has special interests, desires, and problems, which may at times conflict with each other.

You've been listening for two days to remarks by various gentlemen--some of them in the flower business on the Mainland, some of them producers here, and some of them representatives of the airlines. They all have interests of their own. The airline man wants a package that will carry. He doesn't care if you must pay fifty cents extra because it weighs more--his interest is in having the stuff properly packaged. The wholesale or retail florist on the Mainland is interested in high quality products that will sell. The producer, in marketing his flowers and foliage, would like to have a dependable outlet which would accept all of his marketable products. Now, when I say marketable products, I mean products of high quality. I don't mean the culls. I'm afraid in some cases in the Territory we're inclined to try to sell every flower on the plant. The producer would also like to have the net returns sufficiently high to enable him to stay in business and make a little profit on his investment.

HANDLER'S INTEREST As I have said, the handler--the middleman--the retail florist--would like to have a quality product that will sell. He would like to have a dependable supply of merchandise. He wants a reasonable assurance that he will have what he wants to buy when he wants to buy it. The handler would like to have a price structure that will make the product he is buying from producers competitive with supplies of flowers from rival producing areas, and at the same time allow him a margin of profit. These middlemen--the retail florists, the wholesale florists--are not in business for their health. The handler, for instance, is inclined to become unhappy, if he is a wholesaler, when he sees a retailer down the street retailing flowers at a price lower than he has just paid wholesale for the same product. I have seen a letter from a wholesale florist in which he complains that that actually happened to him. I can't think of a quicker way to spoil a good deal. The handler would like to have a uniform product, one that looks as it should look and behaves or lasts as expected--not necessarily forever, but a product that will last as expected.

CONSUMER'S INTEREST Now let's see what the ultimate consumer wants. The ultimate consumer wants fresh, sparkling products. I recently entertained a visitor from Minneapolis. She was remarking about a gift of anthuriums which she received. She was so interested because the anthuriums she received had a black spadix while all the anthuriums she saw here had a white spadix. She wanted to know how she happened to be given such a rare variety. I said, "How long did they last?" She said, "They were marvelous. They lasted almost 48 hours after we got them." Well, that sort of thing is unfortunate. It doesn't help build up a market.

The consumer would also like to see a price he can afford to pay. You must remember that in addition to competition from flowers and foliage from other producing areas, your flowers are in competition with products such as milk for the baby, gasoline for the car, taxes for the tax collector. They are all competing for the consumer's dollar. So the price he can afford to pay is going to determine whether or not he will buy your product. The ultimate consumer also would like to have a dependable supply of several varieties from which to choose.

PRESENT SITUATION Now, what is the present situation? You as producers do not have a particularly dependable outlet which will consistently accept all you produce. Many producers carry on retail operations both here in the Territory and on the Mainland. Some of you wholesale, some of you actually sell to individual customers on the Mainland. There is no agency which serves to establish uniform prices. You, the producer, never know what price you should set. Perhaps you could have gotten a little more. Perhaps if you had charged a little less you could have sold all your crop instead of half your crop.

The receiver of your supplies, the handler, the retailer or your retail customer, is faced with many sources of supply, all clamoring for his business. Many of these sources, however, are not able to assure a steady supply. A retail florist, for example, is not inclined to carry on an advertising campaign to build up a market for a Hawaiian product if he feels that in the midst of the campaign he will receive word from you that you're sorry, but you're fresh out of flowers and you'll write him next year when you have some more.

There is little attempt made at the present time to establish standards and grades. There is wasted money and duplication of efforts in the distribution and sales promotion of Hawaii's floral products. In the past few months I have talked to a number of producers, each of whom has taken a plane trip to the Mainland to search out a market--to see what the situation is. Many trips have been made to the Mainland. In most cases they were comparatively ineffectual individual efforts. Few producers have such a large production that they can really make a good, firm deal with a large receiver on the Mainland. Hawaii's producers, therefore, are competing with each other, rather than competing, as a unit, against other producing areas and other products.

There is no dependable agency at the present time that I know of to keep the producer informed of market conditions--demands, supply, competitive products, new developments. Much information is now available which is not being used, not getting around. For instance, I heard one gentleman tell you this morning that this lovely wax on the heliconia retarded the sale of the heliconia. How many of you ever heard that? If any of you producers here ever heard that wax on heliconia retarded sales, I wish you'd raise your hand. This gentleman on the Mainland knew it, but somehow the communication between him and you was blocked.

A TERRITORY-WIDE ORGANIZATION IS NEEDED What do we need to solve some of these problems? I think previous speakers have told you what the problems are. A number of speakers have come right out and stated what I am about to tell you. You need unified action on a territory-wide basis--an organization of all producers and handlers to act as a unit in the promoting, marketing, and selling of Hawaiian flowers and foliage. Since producers are the most vitally concerned, it seems to me that producers should take the lead in the formation of such a territory-wide organization.

Given such an organization, how could it be used? Well, it could serve as an outlet for all producers, and at the same time as a single source of supply

to customers. It could carry on sales promotion and advertising, but advertising and promotion of the products of Hawaii, not of the products of Mr. Jones, Mr. Tanaka, Mr. Wong, Mr. Apaka. People on the Mainland don't care about names. They want to know that the product came from Hawaii. That's what they're interested in.

A territory-wide organization could serve as an agency to establish fair and uniform prices. That might be done by establishing a Honolulu market, wholesale, or perhaps retail. It seems to me that such an organization should maintain at least two mainland offices--perhaps carry on wholesale operations. It seems to me that such an organization should engage in a vigorous campaign of dealers' promotion. I don't think that is being done at the present time. Show the customer how to use the product. One example of what I mean comes to mind: The bird of paradise keeps putting out new blossoms from the pod. After the first flower is dead there's more in there, but once in a while the bird needs a little help. If the customer does not know that, once the flower dries up he throws the bird of paradise away, and instead of getting two or three weeks service out of it he only gets two or three days.

A dealers' service organization, to teach the customer how to use the flower, I'm sure would improve the demand for Hawaiian flowers and foliage.

An organization could work to establish and maintain grades and standards. So far as I know, there is no meeting of the minds today as to what constitutes a good flower and what constitutes a poor flower.

An organization could conduct or perhaps coordinate research on market conditions, new developments in products, more efficient methods of production, or more efficient methods of distribution.

An organization could keep producers informed of market prices, developments, shifts in demand, threatened competition from new areas, and so forth.

An organization could serve to coordinate production in the various producing areas of Hawaii so that producers would grow what the market wants, and that surpluses or shortages of specific items would be avoided, or at least minimized.

An organization could serve to coordinate distribution in the mainland markets. I have an idea that at the present time Los Angeles may have, at times, surpluses, while at the same time San Francisco is short of certain items. A territory-wide organization, keeping in touch with mainland markets, could avoid such a situation.

Above all else, such an organization could operate to create and maintain good public relations. I heard questions this morning about a picture of orchids being used to fertilize a macadamia tree. If you had a territory-wide organization I think that sort of thing would not have happened. If the story had come out, it would have come out with a different slant. I remember what happened a few years back to California citrus growers whose organization has developed and maintained rigid grades and standards. Fruit not fit for human consumption was dumped in piles along the nearest highway. It wasn't long before consumers began to complain about the mountains of oranges growers were wasting in a deliberate attempt to jack prices up. Citrus organizations got busy and found hidden valleys where few automobiles pass. From then on, waste citrus was disposed of in these hidden valleys. Adverse publicity stopped. That is the sort of a thing I have in mind when I say that a territory-wide organization could maintain and encourage good public relations.

KIND OF ORGANIZATION What kind of a territory-wide organization could do all these things? There are several types of organization which might work.

One type is called a trade association. There are now a number of these in the flower industry here, but their membership is divided and their efforts are, I'm afraid, comparatively ineffectual. A trade association usually acts as an agency to gather and disseminate information to its members and others. A trade association could carry on a sales promotion and advertising campaign. A trade association could do market research and production research. It could recommend grades, standards, and prices. It might be financed by membership fees, dues, and assessments. But a trade association, acting as an advertising medium and as a regulatory agency, would be weak. It could advise, but it could not enforce rules regardless of the fact that the rules might be designed to benefit everyone.

A private corporation might be useful. A corporation could purchase flowers and foliage on contract with producers, and channel all territorial production through one outlet. Producers and handlers could control the corporation through stock ownership. A corporation would have more effective control over floral products than would a trade association, but control of the corporation might get into the hands of those who do not have the best interests of producers, or of the industry, at heart.

A third type of organization which might be effective is a marketing cooperative. Such an organization, given support by all producers, could solve many of the problems of marketing and distribution.

Let's look into the matter of cooperatives for a minute. What is a cooperative? A cooperative is a special type of corporation. While a commercial corporation is organized to make profits for stockholders on the basis of the number of shares of stock which they own, a cooperative corporation has as its main purpose the providing of services to its members. Any excess of revenue over expenses in a cooperative is returned to its members on the basis of member patronage--the use that members have made of their organization. In either case, cooperative or corporation, the members control the organization through an annually elected board of directors, which in turn directs key operating personnel. The operating personnel manages the organization, subject to review by the board of directors. A cooperative would not necessarily have to include just producers. It could also include handlers, at least handlers here in the Territory. If it included only producers, who might at the same time be handlers, a cooperative would have the added advantage of being eligible for certain income tax exemptions. A private, commercial corporation would not have that advantage.

Regardless of the type of organization form, what would be some of the things which the organization could do? We've mentioned that it could establish standards. It could coordinate production and distribution. It could maintain facilities, perhaps packing facilities, in each major producing area and in the principal markets. It could keep its members informed of market prices, new products, etc. It could purchase needed supplies and equipment.

PROBLEMS OF AN ORGANIZATION What would be some of the problems facing a territory-wide organization? Probably the first problem would be that of membership. Unless such an organization has a majority, or better yet, all of the producers, those not in the organization could weaken the efforts of the organization by such tactics as price cutting and the selling of inferior products. Farmers are traditionally suspicious of each other. But if an organization such as I am suggesting is to be successful there must be mutual trust and cooperation of the members. Producers under contract with the

organization would have to sign up all of their production, and would have to live up to their contract. Management of the organization would have to be in competent hands. There is no such thing as a cheap man, only cheap work. Rigid standards would have to be maintained. To attempt to market inferior goods is to risk the danger of spoiling the market for the top grade. Without some discrimination in grade there is little incentive to produce high quality merchandise.

A man yesterday asked, "What do you think of the future of plumeria in Hawaii? Do you think it would pay to grow plumeria commercially? Could we sell more?" Two days ago I met a traveler at the airport. Wanting to buy some leis, I found I could buy plumeria leis for fifty cents. Frankly, they were pretty tough looking objects. The flowers had obviously been lying on the ground. They'd been rained on, they'd been spattered with mud, no attempt had been made to clean them off, they weren't quality blossoms. I think if the lei maker, or whoever supplied those plumeria, could supply a better flower, the lei maker could charge more money, and I'm inclined to think sell more leis. I'm a little embarrassed to hang a plumeria lei, such as I have to buy all too often, on a friend coming from the Mainland.

Pricing policy would be another problem faced by any organization such as we're talking about. The pricing policy would have to be realistic. Excessively high prices could have bad effects. Excessively high price may force customers to turn to competitive products, and there are many such products. If an organization returned too much money to producers over too long a period, it would encourage more production. If you encourage more production, then you're going to be faced with the problem of expanding your markets even further. I believe that your markets can be expanded, but it would be too bad to have production come too fast before you have sound marketing policies established. Within certain limits, prices should be uniform to all customers in the same class and in the same area. You have just heard the reactions of one of your guests, Mr. Goepfner, who bought wood roses only to find that a competitor had bought them cheaper. Never discriminate in prices between customers who can get together to compare notes. (Laughter)

An organization would have to be everlastingly on its toes, to seek cooperation of all those involved in the deal--the producer, the handler, the transportation service, the retailer. An organization would have to know their problems and seek to aid in their solution. Problems, complaints, beefs would have to be anticipated and properly dealt with before they became major issues. Just sending a disgruntled customer another box of posies isn't necessarily the best answer.

SUMMARY Let me summarize what I have said. There are these groups interested in the flower deal in Hawaii: the producer; the middle man such as the wholesaler, the retailer, the transportation company; and the customer. Each has interests which at times seem conflicting, but which, given enough thought and planning, can be resolved. To resolve these conflicting interests there needs to be an organization encompassing the entire Territory. In my opinion, the best solution seems to be a cooperative. But for such an organization to be successful producers must be willing to work together. A successful organization isn't brought by the stork. You have to work at it. It can only become possible through the mutual efforts of all those who would benefit from it. That means all of you.

THE SOCIETY OF AMERICAN FLORISTS AND YOU

John Henry Dudley

It is indeed a pleasure to be given this opportunity to say a few words on behalf of the Society of American Florists. This is my maiden appearance at a floral meeting since my election as president of the Society in Seattle. I did not come here solely to represent the Society, however. My plans to attend this Clinic were made some time before I became president.

One thing in particular has occurred to me as I have sat here through your beautifully planned sessions. You have many problems and you have come a long way toward solving them, but they are like many of the problems we have on the Mainland. We have one industry; we are all involved; we have one big problem and that is to sell more flowers to more people. Only by coordinated efforts are you going to solve your problems as we are trying to solve ours. I urge you strongly to consider affiliating the various associations here with the Society of American Florists. Individual participating members are also welcome. There are many benefits that the Society offers. We have a monthly publication, the "American Florist." A member tells us that one issue gave him an answer to a tax program--the saving was enough to pay his dues for the rest of his life. In addition to that we have a Washington newsletter which is issued monthly from our Washington office.

There are many other benefits. To mention a few, we have a committee set up for our Foundation on Floriculture, our National Fair Committee, our Grading Committee and our Traffic Committee. I haven't mentioned one which you people are not interested in yourselves. Of course, each year we have our National Delegates' Convention which is attended by people from all over the country, and it brings out many interesting discussions. Your grading problems--we have the same problems and we've set up a committee to study them. It has come up with recommendations for the delegates to pass on.

It has been a privilege for me to be able to tell you just this little bit. I would like to finish my remarks by saying that we are very proud that you've had the privilege of hearing from three of our foremost people in the industry. They are really deans on the Mainland. And it is interesting to note that the three gentlemen, Mr. Goepfner, Mr. Sykora, and Mr. Haley, have all played an active part in the Society of American Florists. Mr. Sykora is a former board member; Mr. Goepfner is a former board member; and Mr. Haley is chairman of the Traffic Committee. Interestingly enough, in Mr. Haley's area every grower which he represents is a member of the Society of American Florists. Why? Because they feel they cannot advance without coordination and unification of the industry.

Nothing is ever done in any walk of life without somebody leading and somebody selling. With anything you do, something has to be sold. You have an opportunity to become part of this national organization, representing the industry and organized in 1855 with a charter from Congress. I'd like to leave here with a feeling that I brought you a message from the Society and with a few memberships. I am the only salesman allowed on this program regardless of what you heard today. I am the only man who was given permission to actively mention his product and in addition to try to sell it. I have a few helpers here, Mr. Sykora, Mr. Goepfner and Mr. Haley, who have little yellow application blanks. They are to be used. There is information on the tables out in the lobby and if I can answer any question today or tomorrow, I will really enjoy talking with each of you. Thank you very much for this opportunity to address such a fine group.

THE PROMOTION OF A FLOWER

O. Ben Haley, Jr.

THE BACKGROUND Yesterday I told you of the chaos and despair existing in the Colorado flower market in the 1930's--the desperation of the growers and how they got together so that they could buy coal on credit collectively after they had been refused any further credit as individuals. It was at this time that the growers there first proved to themselves that they could perform certain things better as a unit than as individuals. And I told you that this was the beginning of progress towards the comparative security one finds in the Colorado carnation industry today. We use the word comparative, advisedly. We have a situation in Denver which might be described as this: One-third of our growers are prosperous as flower growers go--none of them are millionaires. One-third of them are making a living; and one-third are slowly going broke. It isn't because they're large that they're getting rich or because they're small that they are going broke. It is the same story we have in other industries; good growers practicing good techniques are getting ahead, and poorer growers are going behind.

HOW COLORADO GROWERS WORK TOGETHER The Colorado growers, in their endeavor to work together, have tried several different methods in the last 15 years. Always, let me say, we have worked with the approval and advice of legal counsel. Today we have in Denver four distinct and separate wholesale houses. Each has growing contracts with separate growers and each is competing independently and very vigorously for the retail market. To clear up any misunderstanding I may have left yesterday, let me tell you that there is not now and never has been any price agreement between these separate wholesale houses. As a matter of fact, it is a rare occasion when identical prices do exist among the several houses. For example, I told you yesterday that the prices I quoted were the prices of my company. Our largest competitor had a price all during the winter market of 15, 12 and 8 cents and we had a price of 16, 14, 12 and 8 cents. They did not grade out the fancy carnations from the selects. They threw fancies and selects together, called them all fancies, and sold them at 15 cents each. We graded ours out and sold the select at 16 and the fancies at 14. After Mother's Day we could see that our quality was going down and that we had few, if any, select carnations left; so we withdrew the 16-cent grade from the market. We were then selling our top grade fancies for 14 cents. Our next largest competitor was selling his top grade fancies for 15 cents. About 10 days later he withdrew his top grade (15-cent) carnation and had a top price of 12 cents. About 7 days later we evened off with him. Apparently, the same competitive forces that Dick Dare spoke of yesterday work in the flower industry as well as in the airlines. In the long run our prices are apparently comparable to our competitors.

THE COLORADO FLOWER GROWER'S ASSOCIATION How then, you ask, do you collectively advertise, conduct research, and so forth? We do this through a nonprofit organization known as the Colorado Flower Growers' Association. All the commercial growers of Colorado have the opportunity to join this group, and are urged to do so. About 95 percent of them actually do belong. Let me read you the objectives of this organization:

- (1) To advance the business interest of its members.

- (2) To take proper action against proposed laws and regulations which are detrimental to the flower industry and to support measures beneficial to the industry.
- (3) To promote and encourage the development of the flower industry.
- (4) To improve and classify the products of its members, and to establish standards of quality for flowers and issue indices of quality for use in the sale of flowers from Colorado
- (5) To hold meetings and exhibitions.
- (6) To collect funds for publicity and research and to disperse such funds as prescribed in the bylaws.
- (7) To foster good will among its members and other branches of the industry.
- (8) To affiliate with the American Carnation Society as a regional organization, and to affiliate with the Society of American Florists and Ornamental Horticulturists.
- (9) To cooperate with the State Agricultural College and the State Agricultural Experiment Station.
- (10) To disseminate floricultural knowledge to its members.

These are the objectives of the Colorado Flower Growers' Association. Do you see how closely they would fit into your pattern? Incidentally, Mr. Dudley told you that our members all belong to the Society of American Florists. I might add that all of our carnation growers belong to the American Carnation Society and all of our rose growers belong to Roses Incorporated, which is the national rose organization. We found that such action pays off. The Colorado Flower Growers' Association then is the vehicle we all collectively use to sponsor research and to promote our products and to enjoy good fellowship.

THE PROMOTION OF A FLOWER Several years ago the Colorado Flower Growers' Association became alarmed. There was no long-term plan to collectively promote the use of our main product--the Colorado carnation. A committee from this group was appointed to study the problem and to develop a plan. I had the opportunity to work on this committee. We almost immediately determined that our problem was: (1) to encourage retailers to use more Colorado carnations; (2) to endeavor to create a demand at the consumer level for Colorado carnations so that Mr. and Mrs. John Q. Public coming into the retail store would request not just flowers but Colorado carnations. How could this be done and where would the money come from? We soon learned that the growers would contribute one and three-quarter percent of their gross receipts from sales to support this program. By calculation we determined that this would produce an excess of \$50,000 a year. This last year it has produced considerably in excess of that, and as a result, our advertising program allotment has been stepped up each year.

The first year we had \$50,000 to start with. At this point we talked to several advertising agencies, and engaged an agency which in our judgement had a proposal that best fitted our ideas. This plan contemplated consumer advertising in color in top-flight home magazines to create the consumer demand we spoke of a minute ago. We eventually chose "House and Garden" and "House Beautiful" as the consumer magazines we wanted to use. We chose them because they are known as top-flight shelter magazines. People of high income buy and

read these magazines, and they are read not by just one person but from 10 to 12 people per issue, according to surveys that have been made. We had little money so we had to be effective. We had learned the lesson earlier that style-- and I'll talk more about it later--filtered downward; it never went up. You'll never see an article introduced through the dime store work up to your top-flight stores. You'll see articles introduced through your top-flight stores eventually work down to your dime stores, but you'll never see it go the other way. Now, let me show you some of the samples; and I want to call your attention, in case you ever get into any consumer magazine advertising, to some of the mistakes that we made and you might make. Here are two of our earlier ads (demonstration). I want you to see that in all of them, from the very first, we used the trademark which I'll speak of in a moment. We always speak of the Colorado Carnations and Colorado Flower Growers' Association. This past year we developed a slogan that we believe is a good one: "Colorado Carnations say it best."

ADVERTISING PROGRAM The plan contemplated, first of all, consumer advertising. Next, trade advertising in florists' trade journals to create a demand at the retail level for our products and to advise the retailer that we were doing consumer advertising. This was the first time in history where flower producers tried to create a consumer demand for their product to be sold by the retail store. We created a demand and we created good will. To do this we reprinted this ad (consumer ad) in the trade journals (demonstration).

Third, the plan called for the development of a trademark to protect our investment. We felt that was tremendously important. It was one thing to promote carnations but in order to capitalize on our investment we had to trademark our product. So you see why the trademark developed and now you can see how we use it. Every bunch of carnations that goes out is wrapped by the wholesaler in this cellophane sleeve. It has the trademark on the bottom and the name of the wholesale house on the top but it is identified as Colorado carnations (demonstration).

Further, we have a seal, a little aluminum seal that we put on every sixth carnation; four to a bunch. When this seal is affixed it cannot be re-used and we are now asking the consuming public to demand not only Colorado carnations but to demand proof that they are Colorado carnations. More and more consumers are looking for the seal on the product (demonstration).

You see how we have advertised to the consumer and how we have advertised collectively to the retail florist through reprints of the consumer ad. Each of the individual wholesale houses ties in its own individual advertising with this campaign (demonstration).

Another aim we had was to get Colorado carnations to the right persons. To do this we saw to it, with the help of friends, that Colorado carnations were in evidence in important fashion shows such as those in New York. There hasn't been an important style show in New York in the last three years in which carnations from Colorado were not in evidence. They were always present on the tables or worn as corsages. We have seen to it that leading photographers have access to Colorado carnations. So it is that you quite often see furniture manufacturers showing a room setting in "House and Garden" or "House Beautiful" with carnations on the table. We try to supply our carnations and make them available to the photographers so that they will be used. We have also seen to it that our carnations are on the trains going out of Denver. The Burlington and D. & R. G. use carnations exclusively in their dining cars and give us due recognition for having supplied the flowers. Incidentally, the Sante Fe Superchief recently put into service the first private dining car service in the nation. It is the

finest dining car on wheels. Yellow Colorado carnations are used exclusively in this dining car and are so labelled. Incidentally, the Santa Fe pays for every carnation used--16 cents a bloom for each one of them--and the arrangements are replaced frequently. We make a shipment to them each day. We make carnations available to the design artists in design and trade schools. We ask that they work with Colorado carnations and we see to it that they are adequately supplied, just as long as they give us due recognition and none are wasted. We feel that it is very bad psychology for a flower to be wasted.

Lastly, we learned early that it would be very good to have a colored movie to tell the story of our product. Retailers know the reaction of the public to paying a fair price for flowers. We felt that if we could tell the public or show the public the work and the effort that goes into the production of a flower we would make them more receptive to paying the price. This movie, which you will see in a moment, was originally prepared for showing at garden clubs, design schools, and so forth. It tells the story of how the Colorado carnation is produced and then later shows its many uses. We now have 20 prints of it and there is no charge for its use. We are booked over two months ahead for the movie and have been for the past two years since this colored movie was made. It has been estimated that several hundred thousand people have seen this movie. This concludes my talk, but before I go I want to say thank you. My wife and I have never enjoyed a trip as much as this one. We have never met more hospitable and more gracious people than we have here. Thank you for a most gracious stay here in the Islands. (Movie followed.)

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ORGANIZATION SESSION PANEL

Moderator: Robert Craig, Partner, Hawaiian Economic Service.

Members: O. Ben Haley, Jr., James Sykora, John Henry Dudley, Edward Goepfner, Irwin Rust, Junichi Yamada and J. Milton Warne.

Craig:

I appreciate the opportunity to be the moderator of this important panel. Before we enter into a discussion of the organization problem, I wish to bring to your attention some of the pertinent facts behind this Clinic. First of all, I would like to express to you the idea that what is happening here is typical of the American system. Here we find an enterprise, the floral industry of Hawaii, cooperating with government in the development of the Hawaiian economic base. This idea of business and government cooperation is typically American. It has grown up over a span of 175 years. Were it not for this kind of cooperation, we would not have a railroad system, a postal system or airlines in America. The role of government, as is determined by its people, is to provide a favorable climate for industrial expansion. The role of government is not to enter into the operation of business. Here, in Hawaii then, in the course of the past year and a half, the University of Hawaii, a government agency, as a grantee of the Industrial Research Advisory Council, another government agency, has expended about \$12,500 to produce the climate, the facts, and the economic determinations to set the stage for what you are seeing here.

This work which has been done by the University's College of Agriculture, specifically by Mr. Rada, is going to be extended for another two years. That agency has already been given a grant of about \$16,000 for additional research and further work in connection with the Hawaiian floral industry. About half of the expenditure that is being made in carrying forward the research programs in connection with the work for the floral industry is in the form of reimbursable receipts, which are granted to the Territory of Hawaii by the Federal Government. Those are the facts that stand in the background of this undertaking.

It is commonly said that when three Frenchmen get together, they try to form a new government; when three Russians get together, they start a revolution; but when three Americans get together, they start an association. You have had ample evidence given to you here in the last two days that the association approach to the development of industry on the part of private enterprise is the thing that bears the most fruit and produces the best chance for success. We are amply associated in Hawaii, if you look at the first page in this little Floral Clinic program. We have the Hilo Florists and Shippers Association, the Kauai Flower Growers Association, the Florists and Flower Growers Association of Hawaii, the Lei Flower Growers Co-op, the Lei Sellers Association, the Floral Association of Maui, and the Hawaii Flowers and Foliage Association. Here we have a new creature, Floral Associations of Hawaii, as cosponsor with the University of Hawaii for the floral clinic, which you are experiencing and from which I hope you will

can't be other than helpful. I am sure that you are in for an era of better understanding of your problems, of yourselves, of your neighbor's problems, and therefore, for an era of cooperative effort forward. It's like the pilgrimage to Mecca--every two steps forward may mean one back--but I'm sure that it will mean progress. (Applause.)

Craig: Mr. Warne, what have you to say?

Warne: I think I can express the feeling of every flower grower present here, and the room is full of them, of the appreciation for the ideas and stimulations and frankly scoldings we have had from our mainland guests. It has done us a lot of good and I think that we are going to benefit from the Floral Clinic. As a grower, I would say that this is what we have wanted. We have certainly gotten all that we can hope for from it.

I suspect that our moderator and our secretary, Mr. Rada, are looking forward to some of us speaking about the hopes for an organization. The Clinic itself is an expression of the value of a sort of trade association which can get us together. As a grower, I think I sense the feeling of other growers in support of such an idea. (Applause.)

Craig: Mr. Dudley, you are fresh from the tussle of having come into the chairmanship of a national organization. Do you wish to leave a parting word with us?

Dudley: I would like, if I may, to recall to you the keynote expression by Governor Long yesterday morning, and also the beautifully put words that our moderator has just finished. The two of them, in my opinion, parallel the whole problem that you have here. I think it is quite significant and extremely interesting to those of us from the Mainland that you not only have interest expressed on a governmental level but right down to the fostering agency--the University itself. Therefore, it needs only the third link, and that is the grower, retailer and wholesaler, to make a unit. You are to be congratulated. Perhaps it is like a birthday party where the child comes of age, and is given his tools and told to go out into the world to make his own living. (Applause.)

Craig: Mr. Rust spoke to us earlier today and we would like to hear from him again on this panel.

Rust: Mr. Craig, as I understand it, what you would like to have us talk about right now is the favorable economic climate, created by government, in which industry can develop. Just a few minutes ago I spoke about several possible types of organizations. A cooperative, which is one of the organizations I talked about, could take the form of a trade association, such as Mr. Warne suggests, or it could go one or two steps farther and actually get into a marketing operation. Regardless of what it does, the possibility of forming a cooperative in the Territory of Hawaii was brought about by the enactment in 1949 of Act 234, the Uniform Agricultural Cooperative Association Act.

In 1922, the Federal government passed the Capper-Volstead Act, which was a federal enabling act permitting the formation of

draw great benefits. So we have an association of associations. We are now at that stage in this development when we must consider where we are going to go from here. In accordance with the loftiest concepts of the American system, government has done and will continue to do its part in assisting in the establishment of a favorable climate for the development of this already multi-million dollar industry. It is up to you, as the representatives of the respective associations and as individuals participating in the benefits of government's efforts to assist you, to decide now what your responsibilities are and to move in the direction indicated for you by these wise and wonderful leaders in the American floral industry, who have given you the benefit of their experiences. I think that if we sum up what we are going to learn here this afternoon, we are going to go away from here with one message. That message is, "Go thou and do likewise."

You'll hear no more from me. I am going to ask now that we start with the center of the table with Mr. Goepfner and have each member of the panel make a little statement in terms of the tone I have tried to set so that you may have food for thought with regard to what follows immediately after this panel.

Goepfner: I don't know why I should say anything more. I think this is the time for me to say thank you very much, and I also feel that you have been so attentive, so gracious and so eager to get information that it has been very easy to think of things to say. After I leave here, I know I will think of some other important things I should have said, but I can't help feeling that the Clinic has real meaning for ourselves. I still say that we can't give without getting. (Applause.)

Craig: We will alternate and take a Hawaiian viewpoint now. Mr. Yamada, can you give us your reaction to this session?

Yamada: I represent the Kauai Flower Growers Association. We have 11 members present at this two-day clinic. I feel that it is a fairly good representation when you realize that we organized only a year ago. Although we are rather late in organizing, I feel that we have much to learn and that we can benefit a great deal from a clinic like this by learning the errors that the other organizations have made and profiting from that aspect. It has been worthwhile for me and I have talked to a number of our members. They all feel that the clinic has been very much worthwhile. (Applause.)

Craig: Mr. Sykora, you haven't spoken since 9 o'clock this morning. Suppose you give us the benefit of your reaction.

Sykora: Actually, I haven't anything more to add to what has been said. I'm sure that a gathering of this kind with a free exchange of opinions can only be fruitful and can result in good for everyone in the industry. I am sure that all of us would be reminded by what I think Carlyle said, that "ten men united in love are capable of being and doing what 10,000 would surely fail in."

I believe that there are no truer words than those written or spoken; so I am sure that getting closer together and letting out what you have been growling about to yourselves and to your families

farmers' cooperatives. We have many laws, both Federal and Territorial, permitting the formation of corporations. We have the Clayton Anti-Trust Act of 1914, which declares, among other things, that farmers' cooperatives are not organizations in restraint of trade, and therefore, they do not violate the Sherman Anti-Trust Act.

Those are a few examples, Mr. Craig, of how government has attempted to create a favorable economic climate in which industry may develop. I might mention one other act Mr. Rada referred to this morning. Act 74 of the Session laws of Hawaii, 1951, regulates wholesalers, including floral wholesalers, and protects producers from their machinations. These laws are not self-starting. They require some overt act on the part of the people whom they are designed to benefit. For instance, if a producer feels that he has been injured by the operations of a wholesaler, he has to tell the Board of Agriculture and Forestry about it before they know. Only if he tells them and makes a formal complaint against the wholesaler involved will the government machinery start to work. In the same way, the legislature of the Territory of Hawaii is not going to help you form an organization, be it a trade association, a corporation, or a farmers' cooperative. You are going to have to do that yourselves. It is a two way street--this business of a favorable economic climate. The government may create the climate but you have to plant the seed. Thank you. (Applause.)

Craig: Before we hear from our last commentator, I want to make him feel very much at home in Honolulu. Ben Haley, do you know that there is only one city under the American flag that has more days in the human comfort zone than Honolulu? Well, that is a fact. The human comfort zone is determined by wind velocity, sunshine, humidity and temperature, and it does not necessarily follow that a nice, chilly, sunny day is uncomfortable to human beings. The one city under the American flag that has more days in the human comfort zone than Honolulu, is Denver, Colorado. (Applause.)

Haley: And, I came to Hawaii to learn more about Denver. There is little I can add to the many things that have been so aptly said. My impression, as this session comes to a close, is that we all came here thinking that the problems were rather simple. We go away, realizing that the problems are complex. We came here with suspicions and some worry as to whether or not something could be done. I believe that people are going away with the determination to do something. To me, that is the important thing that has been done by this Clinic. There is one other thing, I believe, that many have gained. The road won't be easy. Don't expect to arrive at the promised land next year. It will take many years to improve conditions and it will take hard work by everybody. What you hope to do in one year--allow five--and maybe you will do it in three. (Applause.)

Craig: You have seen a good example of what good organization and many, many hours of rehearsal will do. With this panel of experts, we have come out exactly on the button--we have 10 minutes for questions.

Q: You stated in your talk that you didn't like to hurt flowers. Do you strip the leaves off the flowers? Many of my clients think I am unkind to flowers for stripping the leaves off, say, roses.

Goeppner: In that case, I don't know who would be the judge. I can relate a story, however, on this subject. During the rush periods we always hire extra help, and we usually put most of them to packing orders. The girls were given instructions and trained. This one lady we had trained was instructed to be sure to read the orders. She did, and she was taking all of the foliage off the roses. Someone soon discovered it and asked her what she was doing. She said that the order said, "No greens." (Laughter.) We do take all of the lower rose leaves off, however, perhaps five or six inches up.

Q: I would like to direct this question to Mr. Sykora and Mr. Dudley. The "Allied" type of organization is quite common in the floral industry in the states. I would like to know how it is organized and operated.

Sykora: The "Allied" organization in Chicago is one of the oldest in the United States. It has functioned successfully since 1920, and has brought about more perfect cooperation among retailers, wholesalers and growers than prevails in any other big marketing area on the Mainland. Even there, however, we do not have 100 percent participation, which is a problem in the financing of the organization. In a big market we have an opportunity for a simple organization which you don't have here, scattered over the Islands. In Chicago, for instance, every grower whose marketable produce is sold in our wholesale establishment has one percent of his net return deducted automatically by his wholesaler. This money goes into the "Allied" fund. Every retailer, when he buys \$100 worth of flowers from us, pays 1 percent in addition. Every wholesaler pays 1 percent of his commission each month. As a result, we have a fund annually anywhere from \$125,000 to \$155,000 for cooperative effort. Most of this is spent for the promotion of flowers, and I think that is what you need here, incidentally. You need to present a great deal more of promotion and information to the trade so that it will have an understanding of your problem. We spend \$125,000 to \$150,000 in the Chicago area. We use all media of publicity. Recently, we have played with television and will probably go into television somewhat more heavily. We use television spots, radio spots, and newspaper advertising.

In addition to giving us the promotion of flowers, the organization gives us a common outlet for the discussion of our mutual problems. We have a directorate which is composed of retailers, growers in the main, and three wholesalers. Wholesalers have the smallest group, so have the smallest number of directors. We have monthly meetings, and we have very free and frank discussions of the problems of the industry. It is real cooperation and has a great deal to do with the improvement of quality, improvement of varieties, a better understanding of marketing problems, and all of the problems incidental to growing. That has been the pattern for most of the "Allieds" developing throughout the United States. About five or six years ago, the Society of American Florists sent a man out to help the markets organize "Allied" associations, because it was felt absolutely essential for the best interest of the florists' industry to have as many such cooperatives as possible. Not cooperatives in the sense of marketing co-ops, but cooperatives in the sense of groups where there are common discussions and common attacks of the problems facing the industry.

Dudley: If there is any interest here for "Allied" information, just write to Mr. Bob Roland, executive secretary of the Society of American Florists. He has an extensive file on how to start an "Allied" and maintain it. There are about 40 "Allieds" in the country, aren't there, Mr. Sykora?

Sykora: I'm glad you brought that out, John. I would like to say this to you also that not all of the "Allieds" have the same rules and regulations or methods for the collection of dues. In other words, they are flexible enough to adapt themselves to the conditions in their particular area. In the southern cities, they have been able to get growers a considerable distance from the city to contribute on their retail sales. In one Texas city, they pay a given amount per \$1,000 worth of business instead of on a percentage basis.

Craig: Thank you very much. We have reached the end of our time, and to sum up what has been said, it is still the same as the conclusion I gave you at the opening of this panel and that is, "Go thou and do likewise."

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